The Journal of the
American Medical Association

VOL. XX. CHICAGO, MAY 13, 1893. No. 19.

ORIGINAL ARTICLES.

RECENT ADVANCES IN THE TREATMENT OF DISEASES OF THE SKIN AND SYPHILIS.

Opening address of the Chairman of the Section of Dermatology and Syphilology, American Medical Association, Detroit, June 7, 1892.

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Very great activity has been manifested in the dermatological world since the last report on this subject was presented by your chairman, two or three years ago. There are now dermatological societies in very active operation in many cities of the world, and an International Dermatological Congress was held in Paris two years ago, and now a second is to be held in Vienna during the coming September; the New York Dermatological Society is now also in most active operation, holding its 215th meeting, and the American Dermatological Society its sixteenth annual meeting this summer. At all these societies there has been much exchange of thought and opinion, and very much valuable matter presented, and many new points brought up and developed.

The literature of dermatology has also increased very greatly during the last few years; not only have some new text books appeared, and several manuals, but the current periodicals have been filled with matter pertaining to this branch, and many new things have been brought forward from time to time.

There are now no less than seven journals, all of considerable size, devoted exclusively to the department of dermatology; of these, two are in German, two in French, two in English, and one in Italian; besides several other journals, which have their special department pertaining to this branch. The amount of literature in these and other journals is now so great, that it would be impossible for any one person to compass it, or indeed one would hardly be able to read what is printed in reference to dermatology during the year, even if the entire time was given up to this work.

It is therefore no easy task to cull from the large amount of material that has been presented, such matters as are worthy of presentation before you, and to write succinctly upon recent advances in the treatment of diseases of the skin and syphilis. It would take a long, long while, even briefly to mention the various matters which have hardly found other support than those of the originators of the idea. I will endeavor, however, to briefly present what I consider some of the most important features in this line during the past three years, and shall seek to make the subject matter as interesting and as profitable as possible.

In proportion as our intimate and minute knowledge of skin diseases increases, so will our ability to treat the same tend also to increase, and the more clearly we differentiate between the various conditions found upon the skin, the more likely we will be to cure those cases that are presented to us. During the last few years, a considerable advance has been made in regard to the clearing up of the matter of that protean disease, eczema, which occupies such a large position in dermatology. We all know very well, that in time past, eczema has been to too great a degree a sort of a general carry-all, where are placed eruptions which could not be otherwise named with certainty; and a clinical description made up to embrace the features of all the cases which even rightly have been called eczema in time past would be very diffuse, and would cover a very large number of conditions. It has been the constant hope of dermatologists that the number of skin conditions which could be relegated to this name, would be diminished, and attempts in this direction have been made, more or less successfully from time to time; so that undoubtedly many of the cases which ten years ago would have been recorded as eczema, are now recognized as quite other affections.

As a striking illustration of this may be mentioned lichen plannus, which is now so clearly differentiated, and successfully treated with remedies which are quite different from those employed in eczema.

During the last two or three years, we have learned practically to take out from eczema some other conditions which are almost equally as striking, and which a widening experience teaches us more and more to isolate from eczema as a disease proper. These are the cases which have been so admirably grouped together by Dr. Durhring under the name of "dermatitis herpetiformis," and those conditions which have of late years, under the guidance of Dr. Unna, of Hamburg, been grouped and recognized under the name of "eczema seborrhoicum."

I will not take up your time with entering at all into the matter of dermatitis herpetiformis, which Dr. Duhring has so fully and excellently elaborated, but will only mention that I am continually seeing cases which, in former times I would most assuredly have reckoned either as eczema, pemphigus, or a bullous urticaria, but which are different from these affections (although in some respects resembling one or the other), and which are now recognized and treated under the name mentioned.

Unfortunately our therapeutics of this disease, dermatic herpetiformis have not progressed equally with our diagnostic recognition of it, and I do not know that I can rightly speak of any great advance in its therapeutics. I may say, however, that as far as personal experience goes in a very considerable number of cases, I do believe the disease to be curable in a large proportion of instances, if intelligently and carefully followed out for a sufficient length of time. I have a number of cases which remain entirely

free from the same and have done so for some months and years. Alkalies internally, alternating with large and oft repeated doses of arsenic, together with suitable external application will, in my judgment, control the disease.

Quite a different statement may however, be made with regard to the other disease mentioned, namely eczema seborrhoicum, of which you will hear more in the papers and discussion which will shortly follow. Dermatology certainly owes a very deep debt of grattude to Dr. Unna for recognizing and isolating this condition of the skin; and, although some of his statements and theories in regard to its pathology, and some of his claims with regard to its therapeutics may not all have been confirmed by others, the fact stands out preëminently that we have learned very much with regard to the recognition and treatment of conditions which before were more or less rebellious, but which now when properly recognized and treated, yield very brilliant clinical results.

I consider the recognition and treatment of eczema seborrhoicum as one of the great advances in the line of therapeutics in dermatology during the last few years. I may only mention in this connection that its therapeutics largely consist in very mild parasitic measures, prominent among which stand resorcin and sulphur; when these are properly used in suitable cases, as described in current literature, the disease yields with amazing readiness. I may give the caution, however, that all skins will not bear resorcin, and that every now and then one will be found which will become quite acutely inflamed even under the mildest applications of the same.

In connection with the advances which have been made in respect to special diseases, mention should be made of lupus and tuberculosis of the skin, about which so much was written two or three years ago in connection with Dr. Koch's lymph or tuberculin. The remarkable statements in regard to its effects on lupus patches which were made on all sides, not long ago, which effects many of us saw ourselves, leaves no doubt that tuberculin exercises a powerful influence on tuberculous tissue in the skin; the abrupt cessation of its use is unfortunate, and it is hoped that further trials will be made, and that another year or so may furnish real advances in this direction. As far as I can learn, few if any cases of complete cure have been reported, but amelioration has frequently taken place; in so chronic a condition as lupus it might be expected that the remedy should be continued over a length of time, in order to obtain perfect results.

The main drift of advance in the treatment of diseases of the skin has been in the way of local treatment, and but little positive has been added of late to our knowledge in regard to the *internal therapeutics* of this class of diseases. Perhaps one of the most important points has been in regard to the internal use of ichthyol in controlling acne rosacea, and the diffused redness which is often so troublesome upon the nose. This was, I believe, first proposed by Unna,[1] and I myself have had very abundant opportunity to verify it. The remedy may be given either in drops, or made up into capsules or pills; the former, however, is, in my experience, much more effective. The remedy may be given in doses from three to five, or even up to ten drops three times a day after meals. At first there is some repugnance to it, and to the taste which rises in the mouth afterwards, but this is shortly overcome, and patients who have experienced its beneficial effects, have repeatedly asked for the remedy again and again. It is uncertain as to how it acts, but probably in some manner upon the liver secretion, for in medium doses it very often proves a fairly effective laxative. In this connection may be mentioned also the benefit accruing from the same remedy in hemorrhoids, which was also first suggested to me personally by Unna, and which I have employed in very many cases with most satisfactory results. From the yielding of these two quite opposite conditions to this remedy, we may in a measure confirm the old statement of Plenck: "nasus saepe rubet ex suppressis hemorrhoidibus."

Jamieson[2] reports the cure of lichen planus by means of tartrate of antimony, one-quarter of a grain every four hours for a week, and then three times daily. This is an old remedy which has repeatedly been brought forward in certain cases of obstinate eczema, and it would seem that there is some reason why it should be of value in this and other congestive diseases of the skin.

Barduzzi[3] reports again favorably upon the effect of iodide of potassium in cases of psoriasis; in three diffused universal cases of a very inveterate character, which had been treated with transient success by all the usual remedies, he obtains results from iodide of potassium. In none of the cases was the amount of the drug larger than about one hundred grains daily. McCall Anderson of Glasgow, also reports favorably on the use of iodide of potassium in gradually increasing doses in this disease.

Mouty[4] claims great success from the hypodermic injection of bichloride of mercury, in alopecia areata; the injections are made with a solution of 4 to 1000 in water of which five or six drops are injected around each patch. In this connection it may be well to recall earlier reports upon the injection of pilocarpin in this same disease, which I have myself seen of very great service.

Of the hypodermic treatment of syphilis we will speak later.

Mention must be made of the recent report of Blaschco[5] in regard to the antipruritic effect of antipyrine, administered internally, which has also been confirmed by Dr. Goldenberg of New York. In lichen urticatus, and in urticaria of infants he found it not only checked the itching, but the eruption also ceased under its administration. In a case of pemphigus pruriginosus the itching ceased and the bullæ also ceased to appear. As these affections are recognized to be neuroses, it is quite possible that in this remedy we have a means of their cure as well as relief, which is but another evidence of the marvelous control of this substance over nerve action.

In regard to the *local treatment* of skin affections, there have been very many features more or less new reported during the past few years, some of which have stood the test of time; many others have failed of corroboration.

Some time ago *lanolin* was highly vaunted as an excipient for local applications, and it was urged

[1] Unna Dermatological Studies, 2nd number 1886 (Supplement to Monatsch f. Prakt. Derm., 1886.

[2] Jamieson. Brit. Jour. of Derm., Sept. 1891.

[3] Barduzzi, Year Book of Treatment, Lea & Co., 1890, p. 258.

[4] Mouty. Ann. derm. et de syph., 1891, No. 5.

[5] Blaschko, Berliner Derm. Verein, July 2, 1890 (Archiv für Derm. und Syphilis, Vol. 23, p. 995.)

that being an animal fatty matter, absorption through the skin was attained by means of it much more freely than by any other substance. It is a little interesting to note that this has been quite refuted by recent experiments of Luff[6] and others, who have shown pretty conclusively that of many fatty substances employed, this afforded the least results in this direction; and further, that, contrary to all expectation, vaseline was the basis from which remedies were taken up most readily into the system; so that I think I may safely say that to-day relatively little lanolin is used by those actively engaged in the practice of dermatology.

During late years considerable attention has been paid to the securing of substances which shall make firm coatings upon the skin, either for protective purposes or to obtain the close contact of remedies to the integument. It would occupy too much time to give even the formulæ which have been brought forward at one time or another, in the way of pastes, varnishes, etc., some of which, however, are of very considerable value. Much credit is due Dr. Pick of Prague, for investigations in this direction. In certain cases, what is known abroad as the zinc-leim is often of very great value; about the best combination for this which I know is the following, which has long been in use in the Skin and Cancer Hospital in New York. The formula is as follows:

℞. White gelatine, 6 dr.
Glycerine, 9 dr.
Dextrine, 1 dr.
Oxide of zinc, 6 dr.
Water, 2 oz. M.

Dissolve the gelatine in water, applying heat; rub up the dextrine in the glycerine, and add to the gelatine when dissolved. When all is liquid, add the oxide of zinc, thoroughly powdered.

This is sometimes very much improved by the addition of a small quantity of ichthyol, say one drachm or more in the above formula. When cold, this forms a rather solid, elastic mass; it is applied by heating it gently in a water bath so as not to burn the ingredients, and then painting it over the surface with a brush. This dries firmly upon the skin and forms a coating of any desired thickness, which adheres quite firmly and, if protected by a bandage, and in places where there is not so much movement, it may remain attached for some days. In making the application it is well to lightly brush the surface with absorbent cotton soon after it is painted on the skin, the fibers of which adhere to it and assist in drying the covering, and together with it make a firm and elastic coating. The indications for such an application are very varied, and it will often be found to serve a most important part in dermal therapeutics. In many cases of obstinate eczema about the legs, it forms the best possible coating, and under its use the infiltration will sometimes disappear very satisfactorily, and there is seldom if ever any itching after it is well applied. It is also a most satisfactory application in many cases of herpes zoster, forming a protective covering unequaled by any other. In old ulcers on the leg or about the feet, very good results are often obtained by coating them and the adjoining parts with this preparation, after a suitable application has been made to the sore itself.

Various modifications of this idea have been presented at different times, one of the most recent and valuable of which is what is known as bassorin paste, presented by Dr. Elliot,[7] of New York, as a base for dermatological preparations. Bassorin is a species of gum, derived from the tragacanth, which is mingled with water, glycerine and dextrine in proportions proper to give rather a firm, elastic mass. It is applied without heating or with very slight warming, being made of the proper consistency to paste over the surface with the addition of warm water; it makes a thin coating over the skin, which dries and adheres firmly, and will often remain on some days; it may then be easily removed with water when desired. This may be combined with a large number of medicaments, such as boric acid, aristol, chloral, camphor, salicylic and pyrogallic acids, resorcin and even tar. Its use is principally in eczema and psoriasis, but may be applied to other conditions when it is desired to keep an application in close contact with the surface.

Dr. Pick of Prague, has recently put forward what he calls *linamentum exsiccans*, as an occlusive and protective remedy, similar to the bassorin paste of Elliot. The formula is gum tragacanth 5 parts, glycerine 2 parts, water 100 parts.

In the same line of therapeutics come even more superficial applications, to which the name of varnishes has been applied, principally those combined with ichthyol. It is often desirable to apply this substance in some strength to the skin, but when used alone it does not dry, and forms a very unpleasant application. In order to overcome this difficulty and to produce an impermeable layer of ichthyol it is incorporated with other substances, making a varnish which can be easily and quickly removed without irritating the skin.

Unna[8] has presented some formulæ which are of value. One of them is as follows:

Ichthyol, 40 parts by weight.
Starch, 40 parts.
Concentrated albumen solution, 1 to 1½ part.
Water, about 20 parts.

The starch is moistened with the water, the ichthyol well rubbed in, and finally the albumen added. He states that this may be combined with chrysarobin, 2 to 5 per cent., pyrogallol, resorcin and sulphur. He recommends the application in certain forms of eczema and psoriasis, and the plain ichthyol varnish in rosacea, seborrhoic eczema and some other conditions. There is certainly yet a considerable field for the study and development of this class of applications, in order to make the treatment of certain diseases more pleasant and satisfactory.

In regard to some of the newer substances which have been lately introduced into dermatology a few words may be added with advantage. In a former report two or three years ago, I spoke of resorcin and ichthyol, which were then comparatively new remedies, and I was not able at that time to endorse them as heartily as I am on the present occasion. When used properly, they are most certainly of very great service in the treatment of many cutaneous diseases. If *resorcin* were never of value except in seborrhoic eczema, its almost perfect control over most cases of this eruption would alone give it a high place in dermatology. In a watery solution of 4 to 6 per cent. with a little alcohol and glycerine, it will commonly control the disease, especially upon the scalp, often in a surprising manner; it should be

[6] Luff, British Journal of Dermatology, Vol. 2, 1890, p. 167.

[7] Elliot, Journal of Cutaneous and Gen.-Ur. Dis., February, 1891.

[8] Monatsch. f. Prakt. Derm., Vol. xii, p. 49.

thoroughly applied at least once daily, and rubbed well into the affected surface. In obstinate acne it is often also of very great service, used very much stronger—even up to 10, 20 and 30 per cent. or more, generally in combination with zinc ointment. This is well rubbed over the affected area and left on the skin over night; it produces a certain amount of drying and desquamation of the surface, which after a few days is allowed to peel off, and a new application is made. The process is a little severe, but very rapid results can be obtained by this measure. As a mild parasiticide resorcin is often very valuable in erythrasma, eczema marginatum and other affections.

Ichthyol certainly possesses very decided anti-pruritic powers, and used in a watery or oily solution from 3 to 10 per cent. will be of the greatest service in certain forms of pruritus, eczema, urticaria, and in dermatitis herpetiformis. In the intertrigo of children a very weak watery solution, 2 to 5 per cent., bathed over the surface and followed by a good dusting powder, will be often all that is required. Ichthyol also possesses very marked healing properties in certain forms of ulceration; after burns it serves to promote epidermic growth, and as an addition to ointments will often aid greatly in the healing of ulcers. Incidentally it may be mentioned that ichthyol is often of very great service internally in chronic rheumatism, and when applied pure to the skin and covered with a woolen bandage, it will often act most gratefully in relieving pain and reducing rheumatic thickenings.

Aristol is another remedy which has found a definite and fixed place in dermatological therapeutics. When dusted over sores, even the primary lesions of syphilis and chancroids, it will often serve to heal them more rapidly than any other application; commonly it will relieve the pain of ulceration, and may be safely dusted on the surface, which is then covered with some mild ointment. Aristol is also of unquestionable value in the treatment of psoriasis, and when thoroughly applied will often cause lesions to disappear quite rapidly. It may be used in any base, but I have more commonly employed it in connection with bismuth and the white precipitate ointment, diluted three times. In order to test the efficacy of aristol I have repeatedly applied the same ointment upon one side of the body with the addition of aristol, twenty or thirty grains or more to the ounce, and on the other the same ointment without such an addition, and patients have repeatedly remarked the much greater improvement upon the side to which the aristol had been applied.

In this connection may be mentioned also the still newer application which is of value in psoriasis, namely, *gallacetophenone;* this is employed in ointments in the strength of 5 or 10 per cent.; the latter being that which I have commonly used. Dr. Goldenberg, who has been my assistant at the New York Hospital for some years, has made very extensive trials of this remedy, and reports upon it most favorably; and for the last few months I have had a very considerable number of patients under its use. I have always employed it alone, either in vaseline or rose ointment; it is to be well rubbed into the patches and left upon them as much as possible; it is non-irritating as a rule, and serves to remove the scales and diminish rapidly the redness of the patches, and after a few weeks' treatment the lesions vanish completely. Dr. Goldenberg reports it to be also of value in eczema seborrhoicum, but of this I have had no experience.

Dermatol is another new remedy of very recent introduction. It is, I believe, a sub-gallate of bismuth, which has been recently advocated very warmly by Dr. Bluhm,[9] principally in ulcers of the leg; it is thickly applied to the ulcer, which is then covered with absorbent cotton and bandaged firmly; the bandage may be left on at first for three days, afterwards changed less seldom. I have used this in a few cases, and the result has seemed to be very satisfactory.

Europhen is a new preparation of similar composition to aristol; its physiological effect is quite like to that of iodoform; it is a yellowish powder with very little odor, containing 28 per cent. of iodine. It is not soluble in water or glycerine, but easily soluble in alcohol, ether, traumaticin, collodion, and oil. Europhen has been successfully employed by Eichoff[10] in simple ulcers, and those of primary and tertiary syphilis, etc. It is used as a dusting powder freely upon the surface, which is then covered with an indifferent ointment, or it may be made into ointment of 5 or 10 per cent. It is expected that it will become serviceable as an internal remedy in syphilis, on account of the amount of iodine it contains in a tolerably free state.

During the past few years considerable attention has been drawn to the value of certain preparations of coal tar, *fuchsine, pyoktannin*, etc. These have been principally brought forward as remedies in cancer and malignant growths, they being supposed to have definite action in altering cell life. While their real importance has been considerably over-estimated at times, they certainly are of value to a limited degree in the conditions mentioned, and also in other states. In a solution of three to ten grains of fuchsine and four ounces of alcohol, or with less alcohol and mainly water, it relieves largely the pain in cancer, and produces a much more healthy surface, as has been repeatedly shown in the wards of the New York Skin and Cancer Hospital. Pyoktannin, in one-fourth to one-half per cent. solution, injected into malignant tumors, has seemed at times to check their growth and relieve the pain; applied externally in about the same strength, it has been of marked advantage in producing the healing of certain ulcers, especially on the leg.

Menthol has steadily come to the front of late years as an anti-pruritic remedy; applied either in the form of an ointment with vaseline as a base, or in oil or liquid albolene, in the strength of 3 to 5 per cent., it will sometimes give the very greatest relief in pruritus senilis; in urticaria, and also in the general itching which will often accompany certain cases of eczema, it may also be well employed in about the same or a little greater strength; oftentimes it will seem to produce too great a chilling effect upon the surface, which may be in a measure counteracted by the addition of carbolic acid to the extent of one or two per cent.

A somewhat new form of application to the skin has recently been brought forward by one of the manufacturing chemists under the title of *stearates*. We are all familiar with the various preparations of *oleates*, which have been before the profession for some time, and a few of which have proved to be val-

[9] Bluhm; Therap. monats. hefte., 1891, p. 616.
[10] Eichoff; Therap. monats., 1891, p. 379.

uable additions to our pharmacopœia. These latter are, as is known, in the form of oily or greasy preparations, they being made with the rather liquid constituent of fat, oleic acid. The preparations now referred to are compounded of one of the solid constituents of fat, stearic acid, and have a very different form and appearance from the oleates, and as far as I have been able to learn from some months' trial of some of them, they are destined to fill a valuable place in dermatology.

The stearates which I have seen have all been in the form of very fine, impalpable dusting powders, and present a delightful application to the skin. Being of a fatty nature they form a very pleasant, slightly unctuous covering when dusted on the skin, and answer an admirable purpose in certain cases. All know the difficulty of securing a dusting powder, especially for the region of the scrotum and thighs, where those with starchy ingredients tend to become converted into a pasty mass. The stearates which I have mainly used are those of zinc, compounded, the one with forty per cent. of salol, and the other with ten per cent. of salicylic acid; there is also one with three per cent. of resorcin, which has also been of service.

Allow me here to present what I consider a decided advance in local therapeutics in connection with the treatment of *alopecia areata*, which I had the honor to report upon at the last meeting of the American Dermatological Association.[11] Although I cannot at the moment refer to corroborative accounts of this which have been mentioned in print, I may say that the method has been favorably reported upon, and a very considerable number of my friends have from time to time spoken of its use, as I have suggested it to them during many years past, and I have employed it myself with satisfaction, certainly for over five years.

The application referred to, consists in rubbing the patches of alopecia areata with a pledget of cotton, twisted upon a wooden toothpick, dipped in a 95 per cent. solution of carbolic acid. This is freely rubbed into each patch and slowly into the tissue around, never however exceeding the extent of two square inches of surface at once. While, as we know, carbolic acid may produce a considerable amount of eschar when applied to other portions of the body, it is remarkable that when the same is made to patches of alopecia areata upon the scalp, there is really very little reactive effect; among hundreds of applications which I have made, I have never yet had a disagreeable result, never more than a slight formation of a very superficial crusting, which disappeared without leaving any scar or doing any damage to the texture of the skin. In most instances, however, there is nothing more than a superficial scaling produced, which passes off, leaving the surface reddened, at the end of a week. In some cases in which I made special experiments with this remedy alone, portions of the scalp were painted in the shape of rectangular figures, and upon them the hair grew most luxuriantly in striking contrast to the surrounding bare parts. I do not put forward this remedy as the only one to use in this disease, for I am not only an unbeliever in its parasitic origin, but also a firm believer in its nervous origin; in conjunction with the local treatment referred to I would most earnestly recommend the internal administration of strychnia and phosphoric acid in full doses, and the use of all dietary measures which may both improve the general health, and nourish the nervous system, such as fats, phosphorus, etc.

In regard to the treatment of *syphilis*, there have been considerable advances made in the line of establishing the curability of the disease, and determining more or less accurately the time of beginning and duration of treatment, and in regard to certain methods of administering mercury, notably by hypodermic injection.

The opinion is gaining ground slowly that it is better as a rule to defer active mercurial treatment until after the appearance of some other symptom of syphilis than the primary sore; the reasons are, both in order to be as absolutely positive as possible in regard to diagnosis, and also because it is believed by some that the later manifestations of the disease are more severe and obstinate if it is checked early in its course, before the roseola appears.

Most recent systematic writers now agree that with a sufficiently careful and prolonged treatment syphilis is curable, both in so far as propagating itself further by contagion and heredity, and also so far as relates to future serious results to the patient: but on the other hand, most writers also agree that in a certain small percentage of cases sequalæ may occur even after the most enlightened and sufficient course of treatment. Two years is the lowest limit assigned for the continuous supervision and treatment by the physician, while some extend it to three or four years.

But, on the other hand, some recent observers are again urging short periods of very active treatment, of a few weeks or months, and speak of the cure of the disease; it is presumed, however, although seldom stated, that reference is made to the complete disappearance of present symptoms, for no one who has had much experience with syphilis will believe that the disease can be permanently cured in any proportion of cases by any such brief measures.

The claims for such satisfactory results are mainly made by those who have advocated the hypodermic method of treatment, and this, therefore, should receive our serious attention. Szadek[12] has made a careful study of the subject, and his masterly paper is well worthy of our attention; I will briefly mention some of the data which he has collected.

Commonly the hypodermic injections of mercury are made deeply into the muscular tissue, principally into the gluteal region, and at intervals varying from every day to even one week apart, the interval depending upon the severity of the case, the effect of the remedy, and the strength of the injection. To read the accounts given in abstract, one would believe that nothing more could be desired in the treatment of this disease. When proper care is exercised in the determination of the dose and interval of administration, and when due skill is exercised in giving the hypodermic injection, the majority of writers believe that neither salivation need occur, nor need there be any abscesses at the point of injection.

The preparations of mercury and forms of administration have varied greatly with different observers, and it would tax your patience too greatly to attempt to give even an abstract of the many different

[11] Bulkley; Journal of Cutaneous and Genito-Urinary Diseases, March, 1892.

[12] Szadek, The Medical News, Aug. 15, 1891.

points which have been presented. They may, however, be grouped under two main classes; first the *soluble* mercurial salts, and, second, those which are *insoluble*.

As is well known, Lewin[13] of Berlin, over twenty years ago introduced on a very extensive scale the hypodermic injection of solutions of the bichloride of mercury, and reported favorably in a large number of cases. Since that time reports have been given in regard to a number of other soluble preparations of mercury; the benzoate, succinide, oxycyanide, and hydrochloric gluten-peptone sublimate, with which latter preparation Huffler of Erlangen, gave upwards of 1,300 injections to seventy patients, with only good results. The solution was so graduated that each syringeful contained two-thirds grain of the salt, representing one-sixth grain of bichloride.

Of the insoluble salts and preparations of mercury a large number have been experimented with, and in most instances favorable results are reported: of these may be mentioned calomel, the yellow oxide, the black oxide, the salicylate, the thymolate, and a gray oil introduced by Lewy of Vienna, consisting of metallic mercury rubbed up with various oily substances. This latter seems to have been the least favorably reported upon, and accidents have occurred in its use, which would seem to render it an undesirable preparation.

The most valuable of these insoluble preparations for hypodermic injection appears to be the salicylate and thymolate of mercury; these have been used in liquid paraffin, or liquid vaseline 1:10, but Szadek advises the former in suspension, in the following formula: ℞. Hydrag. salicyl, gr. xvi-xxiv, mucill. gum. acac, gr. viii, aquæ destillat, 3vj.; of this, fifteen minims was injected every three days. A number of observers have reported very favorably of the salicylate of mercury, there being no abscesses, and no unfavorable results.

The thymolate of mercury has also been successfully employed by a number of observers, a 5 or 10 per cent. emulsion in liquid paraffin being used; or as Szadek again recommends, in emulsion with gum arabic as follows: hydrag. thymoloacet 1.5 parts; mucill. gum. acac, 0.5 parts; aqua destillat, 20 parts. Using this in injection every three or four days he claims that from six to ten injections suffice in most cases of recent and non-inveterate syphilis; abscesses do not occur.

Time does not permit an extended consideration of this subject, but this much is given to call attention to what is regarded abroad, and by many in this country as a most valuable means of combating syphilis.

Such in brief are some of the advances in the treatment of diseases of the skin and syphilis which have been made during the past few years; there is need for yet more earnest work in this department of medicine, for there are yet many more advances to be made, and it is earnestly hoped that the members of this Section of the American Medical Association may do their full share in forwarding the work. Dermatology is a most fascinating study, and one which amply repays all work put into it. Too long has it been the opprobrium of the profession; far too little attention has been paid to this branch of medicine by the profession at large.

[13] Lewin, On Syphilis and its Treatment, Amer. edit., Phil., 1882, p. 17.

If I understand the purpose of this Section it is that the general practitioner may come here and hope to find something which may be of interest and profit, while here he has also a place where he may discuss in a practical way the difficulties which he has met with in his practice, in connection with the diseases which belong to this Section. These Sections of the American Medical Association are not for specialists, where they may discuss abstruse questions or report rare cases; such opportunities are afforded by the special Associations, which meet each year, and in which much good work is done. The Sectional work is, or should be, the main work of this Association, and in proportion as the mass of physicians who compose these grand gatherings of the medical profession shall come in and take active part in the work of the Sections, by so much shall our Association, which we all love, be raised and honored.

In order that our matters may take a practical turn I have, as far as possible, sought to procure practical papers upon more or less common subjects of interest to all, and it is hoped that free and full discussion may follow their reading.

For several years we have also had a Question Box, which stands here on the table, into which it is earnestly hoped that the members will drop questions relating to any topic belonging to the Section work, either those on the program or relating to any subject in dermatology or syphilology which they would like answered. An hour has been set apart on the program for Wednesday afternoon when these will be considered by those to whom the chairman shall assign them. It is also suggested that if there are any topics which any of the members would like fully considered at the session next year, these could also be dropped in the box, and the executive committee to be appointed by the Section will take charge of the same and see to their being properly presented at next year's meeting.

This leads me to speak of the proposed Executive Committee, which it is hoped may be the means of greatly advancing the work of this Section, as said committees have already done in other Sections. Three members of the Section are to be elected to serve on this committee, one of whom is to retire yearly, the place each year to be filled by the retiring chairman of the Section. It is hoped that, by means of these combined executive committees in future the work of the Sections will be so unified that all proper work belonging to each will be referred to the appropriate Section. Thus, on the general program this year, I find no less than five papers to be read elsewhere which fully belong to our Section. If there is anything in Section work all must agree that the highest gain will be reached by including all papers in each program representing the branch to which they belong. Let us hope that in future under the new plan of work there will be much more symmetry of action.

One more point in regard to the forwarding of the work of this Section and I will close. Several of the other Sections have found it very agreeable and profitable to have a dinner to which those interested in each branch represented may come. It would indeed greatly promote our interest in this Section to spend an evening thus socially together, and it is earnestly hoped that this Section may take action similar to that taken by some others. Tuesday even-

ing is that which has been commonly chosen, as it is generally free from other engagements. The dinner need not be an elaborate or expensive one; the others referred to are furnished at two dollars for each one joining in the same. It is earnestly hoped that the Section may take such action during this session as shall lead the officers and executive committee to arrange for such a dinner the coming year.

Thanking the Section for the honor conferred on me in calling me for the fifth time to preside over its deliberations, and for your kind attention at the present time, and hoping that there may be full and free discussion of the subjects presented on the interesting program, which I take pleasure in setting before you, I declare the session of the Section opened for the business on hand.

SOME SUCCESSFUL METHODS OF TREATING ALOPECIA AND ALOPECIA AREATA.

Read in the Section of Dermatology and Syphilology at the Forty-third annual meeting of the American Medical Association, held at Detroit, Mich., June 7, 1892.

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Alopecia and alopecia areata are diseases of the scalp which have always interested dermatologists, and the problems connected with these conditions have acquired a new impetus of late years, by reason of the extensive studies which have been directed towards them. The questions which have been considered mostly are those regarding the etiology and the treatment of these conditions. These questions are inter-dependent to a great degree and for that reason it may not be regarded as inopportune to devote a few words to the consideration of the etiology of these diseases before devoting the major portion of this paper to the subject matter pure. As the etiology and consideration of the causes leading to the diseases of whose successful treatment I purpose speaking, have a considerable influence upon the adoption of successful therapeutic measures, I will offer no further apology for a brief résumé of these questions, more especially as they have been the topics of many long and unsatisfactory discussions and we still regard them as being, in a great measure, *sub judice*.

In regard to the etiology there exists quite some difference of opinion and the advocates of the different theories advanced may be roughly divided into three groups, viz.: Those contending that all cases of these diseases are of parasitic origin; those who contend that the origin of these troubles is of a neurotic character, and those who are inclined to favor the one or the other according to the particular indications presented in each individual case. The upholders of the parasitic theory have made a strong case apparently, but their arguments possess certain inherent defects which are of such a nature as to considerably invalidate their claims. The evidence is far from convincing in a large number of instances, and we have added to this the suppression of the negative cases or of such experiments as do not tend to support the view which is advanced. The fact that strong antiseptics, locally applied, will tend to promote a growth of hair is no proof that the result is due to the destruction of parasites or of microörganisms of a pathogenic character. The further fact that these applications must be of considerable strength serves to invalidate the position still more. For it can be justly argued that the growth is due, not to the parasiticidal properties of the remedy, but rather to its stimulating qualities. Again, we have exhibited to us cultivations of organisms obtained from such cases. Unfortunately for the cause advocated these cultivations have but too often proved to consist simply of saprophytes and the same could be obtained from organisms found in perfectly healthy scalps. Such evidence falls very short of proof and this is the result found in a large number of the cases which present themselves for treatment and who are affected with the troubles under consideration. I do not intend to deal exhaustively with these defects in the matter of proving the opinion advanced, but merely desire to point out some possible sources of error to which investigators have become blinded by their enthusiasm.

Those who contend that alopecia and alopecia areata have a constant neurotic basis, have a certain amount of objections to contend with which they have not yet successfully overcome. They have very plainly demonstrated that parasites are not the cause in a certain number of instances. They have also proven experimentally that lesions to certain nerves were followed by alopecia. But, in some cases, all the neurotic phenomena discoverable and undiscoverable have been treated with no beneficial results, even when aided by external stimulating measures. No results could be obtained until strong parasiticides were employed; and, while claiming merely stimulating properties for these agents, the obvious conclusion could not but force itself upon an impartial observer that the disease was, in fact, of parasitic origin. I do not desire to dilate further on this point but will pass on to that class of observers whose conclusions appear to me to be not only more rational, but correct and in consonance with clinical and pathological observation, besides being confirmed by the therapeutic results obtained.

I refer to those whose contention it is that alopecia and alopecia areata may be due to either parasitic or to nervous trouble, or to both combined. The negative results obtained by the rigid adherents to either of the first two theories have found that in cases of failure a resort to the other method or the adoption of both has resulted in success. Those who persisted in one plan have been mortified by observing nothing but failure follow their best efforts. Some clinical considerations are not dealt with in a manner which the importance of the subject demands. For there are certain objective symptoms which can be observed in some cases which will serve to distinguish between an alopecia of neurotic and one of parasitic origin. Of course, when I refer to alopecia in this paper I do not desire to include the senile form nor that in which the follicles of the hair have been destroyed, atrophied, or lost beyond redemption, but rather to presenile alopecia, defluvium capillarum, and alopecia areata. In the last affection, we find the neurotic and parasitic types rather plainly differentiated by their respective histories and objective characteristics.

In the parasitic form a history of infection may or may not be made out. The disease may be traced to the barber's brush, to infection from caps, hats, etc., worn by other individuals suffering from the same trouble; or nothing definite may be learned in this respect. Itching, of a more or less marked

character, will be found present. The history of the attack will show that the falling out of the hair was gradual and peripheral. On inspection the involved area does not present a smooth surface. It is roughened to a certain degree, and the hairs at its border are lacking in lustre as well as easily broken upon attempting extraction. Those portions of the scalp most often scratched are involved, and include the temporal and occipital portions of the scalp, with occasionally the vertex. Auto inoculation can be very clearly made out in many cases, and the entire evolution of the trouble traced upon the scalp of an individual. Scrapings from an affected area, if carefully rubbed into the skin of a dog, will produce an analogous condition, thus verifying in a satisfactory manner the parasitic character of the cause of the alopecia. It must always be remembered, however, that these conditions only apply to cases which have not been tampered with.

In the neurotic variety of alopecia areata, which in my experience occurs more frequently than the parasitic, we may or may not have a history of neuralgia, traumatism, or nervous or mental shock. The subjective sensations, if any exist, are not sufficiently well marked to attract much attention. The history of the onset is generally that it has been sudden, one or several areas becoming suddenly denuded of hair. These may be roundish or ovalish, or of irregular contour. The sizes of these areas also vary considerably, and while progressive to a certain extent, we have a stationary period establishing itself and an effort at spontaneous recovery. Objectively the denuded spots have a white, almost glistening appearance, the comparison to ivory being a very apt one. A peculiarity which is present in this disease is that it is not limited to the scalp alone, but may attack, as it often does, the eyebrows, axillæ, breast and pudenda. The few symptoms enumerated are sufficiently well marked to distinguish the condition from one of parasitic origin. But we are sometimes called upon to treat cases of alopecia areata in which both a parasitic and neurotic cause is at work. In these the mixed effects due to the different causes may frequently be observed quite readily; whereas in others the problem presents such complications as to require fine discriminative powers as well as close observation and examination.

It is hardly necessary to allude to any considerable degree to the other forms of alopecia which I have mentioned. The same general conditions and appearances will hold as in alopecia areata *mutatis mutandis*. Concomitant phenomena are always found in connection with each individual case, of such a nature as to lead to tolerably accurate conclusions in regard to its etiology. This being done, the rational method to pursue readily suggests itself, and the success of the therapeutic measures employed will wholly depend upon a proper selection of remedies and the method of their application.

Having made these few preliminary remarks I now desire to speak of some of the successful methods which I have employed in the treatment of some cases of alopecia and alopecia areata. I have alluded briefly to the etiology of these affections in order to avoid useless repetition later on, and will premise by saying that I desire to speak of methods without entering into a detailed recital of cases, as those of the same type would be merely repetitions of each other, and on that account possibly wearisome to the reader. I will further state that I only purpose speaking of alopecia areata and of presenile alopecia, these being by far the greatest number of cases of falling out of the hair which I have had occasion to treat, and for that reason, the successful treatment of such possesses more value than it would in cases less frequently observed and subjected to therapeutic measures.

The cases of presenile alopecia which I have had occasion to treat (exclusive of such as are of syphilitic origin), occurred in males, and the majority of these were light blondes. In all cases the hair was fine and silky and the scalp rather pale. In some seborrhœa existed, and the amount of secretion varied from a very small amount to quite a considerable quantity. In all there was a history of more or less itching and of a gradual loss of hair, chiefly at the angles of the forehead and at the vertex. Combing the hair showed that this loss was considerable, although a certain proportion consisted of bed-hairs, so that the actual loss was by no means equal to the apparent. All were individuals who were otherwise in apparent health and whose functions in general seemed to be in perfect condition, with the exception of one, possibly. The nervous system lacked that stability and repose which should exist in the normal individual and which is so essential to proper assimilation. While this condition was not so apparent in all, those who did not exhibit the grosser phenomena of nervous disturbance exhibited psychical phenomena which plainly pointed to this state of affairs. Irritability upon slight provocation, anxiety concerning trivial affairs, depression of spirits out of proportion to the exciting cause, and similar perturbations showed themselves as evidences of the neurotic condition present in the individual. A prominent feature was the hopelessness of the patient so far as regarded any ultimate result in the treatment of his case. It will be readily seen that such cases are not very promising, yet a little moral suasion has quite an effect in improving such a condition, and success is not the impossibility which it might appear at first blush. The general treatment I have adopted has been various in different cases, but has been directed to the amelioration of the nervous system. In some cases I have ordered the following pill thrice daily:

℞. Strychnia sulphat, gr. 1-60.
Ferri redacti, gr. j.
Quiniæ bisulphat. gr. j
M. Ft. caps. No. 1.

Or, if starvation of the nerves seemed to be present, the compound syrup of hypophosphites (Fellows) was ordered taken in drachm doses four times daily with a milligram (1/60 grain) of strychnia sulphate with each dose. In some cases I have found it advantageous to supplement this treatment with muriate of pilocarpine taken at bedtime, a powder containing 1/8 to 1/6 of a grain of the remedy being taken in water. The effects of this internal medication was not a matter of coincidence, for, by its alternate withdrawal and resumption, most notable differences could be observed. These differences were so marked as to attract the attention of the patients and lead them to the conclusion that the internal medication was of a most beneficial character in the improvement of the local condition. Such results occurred not only in one case but in several, and, although failure might follow the same course in some future

cases, the success which has been accomplished is sufficiently encouraging to justify a continuance of the method until a better one can be suggested that will stand as rigid a test.

Alopecia areata presents difficulties, occasionally, of such a character as to almost make us despair of any successful issue. I have been extremely fortunate in securing good results and can only attribute them to the energetic means which have been used. Before entering into the consideration of the treatment I desire to premise that I have always been careful to distinguish between the parasitic and the neurotic varieties of the affection. Having done this the treatment was adapted to the condition present, and, whilst one method might fail, the general principle was always kept in mind in the application of therapeutic measures.

In the parasitic form of alopecia areata I have used two parasiticidal mixtures. One, the weaker, for the purpose of applying to the entire scalp and thus preventing new infection and a further spread of the trouble; the other, the stronger, to apply directly to the implicated areas for the purpose of destroying the parasite and thus producing an end to the disease. Both preparations were ordered applied twice daily; and as all the cases I observed occurred in males I had the hair clipped close to the scalp, thus facilitating a thorough application of the remedy. For the weaker application I first used a $\frac{1}{1000}$ bichloride of mercury solution, afterwards using instead a 3 per cent. creolin solution. Both acted well and the only advantage in the latter is the smaller danger of toxic infection from its use. This wash is to be applied to the entire hairy scalp, the affected areas being attended to after the first operation has been gone through with. For the affected areas I ordered the application of sapo virides and this to remain about five minutes. Then a mild scrubbing with warm water and, after thoroughly drying, the following to be rubbed in in small quantity:

℞. Hydrag. bichloride, gr. j.
Lanolin, ℥i.
M. Terebene.
Sig. Apply twice daily.

In a comparatively short time a strong healthy growth of hair could be observed.

I desire to state that it is not always necessary to apply this last daily. It will be easily determined by the observer whether this is necessary or not. Not infrequently one application a day or every other day will, in a short time, be all that is necessary. I have had no occasion to change the composition of this application, as in the few cases in which I employed it, it proved satisfactory.

In alopecia areata of neurotic origin which, in my experience occurs much more frequently, I have given internal treatment in some instances and not at all in others. After trying various internal remedies with more or less success I have finally adopted the same preparations as those I have spoken of in the treatment of presenile alopecia. They have seemed to serve the best purpose and gave the best final results. I have also observed that this internal treatment is of positive and undoubted benefit. Discontinuing the remedy is followed by inferior results and the effects of the resumption of the treatment became very quickly apparent. In some cases, however, general treatment appears to be entirely unnecessary, but I have found them to be very few in number. It would appear that they are such in which a sudden shock was experienced from a traumatism, and the nerve equilibrium was regained in a comparatively short period of time. Even in these, however, if no form of treatment has been essayed for some considerable period of time after the injury internal treatment is found of benefit. Yet cases of the last class must of a necessity be very infrequent. In those experimental cases in which nerves have been excised and the operation was followed by alopecia areata, the regeneration of the hair occurred spontaneously, and local as well as general treatment appeared unnecessary; but they are certainly not cases which could be given as a criterion by which to judge.

To come to the local treatment of alopecia areata: The methods which I have found successful are essentially of the same character, although they differ materially in application. I do not claim any originality for either, as one is rather old and the other was suggested some little time since. They are essentially irritant in nature, but efficient in effect so far as my experience enables me to judge. The first one which I employed is the suggestion of a French author, and consists in applying cantharidal collodion to the affected area. After vesication has been established a dressing of some bland ointment is used. As is well known, cantharidal collodion varies much in its composition. We find that in some instances it acts very promptly, whereas in others its action is quite slow. Again, its effects in the same individual may be comparatively superficial or quite deep, depending upon the degree of the cantharides present or the activity of the fly used in its composition. These circumstances necessarily acted as factors in controlling the frequency of application of the remedy. In some cases I applied the cantharidal preparation twice a week, and in others it could be used but once in the same length of time. The reaction was more or less prompt and, in some cases, I have had the unfortunate experience of seeing no effect of a distinct character beyond some superficial irritation of a rather mild character. However, by obtaining a good article I have been enabled to obtain excellent results in a comparatively short time. While the effects produced were of the best, the various inconveniences attending its use made the method anything but a pleasant one to the patient. The collodion is not a very easy method to manage. It mats the hair, does not look well, is very difficult to remove and is inconvenient to handle. Added to this, the disagreeable necessity of continuously applying an ointment further increased the aversion of patients to the entire curative procedure of a local character. I often experienced much difficulty in persuading patients to continue the treatment, and it was only the good results obtained which led them to submit to it in the hopes of a speedy recovery and a proportionately short submission to the entire process. This difficulty was particularly marked in females, and it was with much trouble that many could be persuaded to continue a routine which was so distasteful in many respects.

When a new method was announced which obviated many of these inconvenient accompaniments, and which was claimed to be much superior in its results, I immediately adopted it, and desire to express here my complete satisfaction with the results attained through its use. I also desire to express

my gratitude, in a personal point of view, to its originator; and I have no doubt every dermatologist who has given the method a fair trial will join me in this expression of thanks. I allude to the applications of pure carbolic acid as advocated by L. Duncan Bulkley. His technique is about as follows: He advises the application of pure carbolic acid once every two weeks to the affected areas. The amount of surface to be thus treated must not exceed two square inches. He furthermore states that two, or at the most three applications will suffice to effect a complete return of the hair. It may be Bulkley's experience to have had tractable cases; or I may have been unfortunate enough to have only stubborn ones. This much, however, is certain: As soon as the method was announced it struck me as a particularly good one to use. I had a patient to whom it was applied as directed, but I had no success. This led me to modify the treatment, which I did as follows: Instead of making an application once every fortnight I made it twice a week; and instead of limiting it to two square inches I applied it to the entire surface which was involved, this amounting to about ten square inches. Moreover, I was not at all satisfied with the ordinary 95 per cent. carbolic acid which I could obtain. It did not seem to be sufficiently strong. I obtained some pure English carbolic acid, and by its means obtained more rapid and marked effects. With this product it is unnecessary to rub forcibly into the skin, and the result obtained appears to me to be much more satisfactory. It is true that my experience thus far has been limited to but a few cases, but they have proven so satisfactory that I will continue until something better is offered. The method of applying the agent consists in freely swabbing the affected area with it, no matter how much of the scalp is involved. Those portions which are affected by the acid turn milky white in a few moments, and if any are not thus affected they are touched again. This is all that is necessary. If the parts which turn white show that inflammatory reaction has been very marked, they are passed over at the next sitting. Generally, however, there is at most but a slight amount of desquamation.

Such a treatment, while rather painful, is efficacious. I have been in the habit of also employing it in presenile alopecia, in a modified manner. Instead of applying the carbolic acid liberally I have done so sparingly, and at intervals of one or two weeks. The impulse this procedure gave to the growth of hairs was quite noticeable.

I do not wish to take up more time with the subject. My object has been simply to submit an experience I have had and one which, up to the present, has been highly satisfactory to me. It is certainly to be presumed that, in the hands of others, the same results should follow the same line of treatment and be attended by the same success. That the methods I have described are infallible I certainly do not wish to claim; but that they are sufficiently rational to induce a trial I hope has been shown in the foregoing paper.

I do not desire to detail any successful cases, as I have already overstepped my limits in this paper. The methods I have described have been used upon quite a number of cases, and the successes which have been attained have led me to describe what might prove equally successful methods in the hands of others.

ON THE DIAGNOSIS AND TREATMENT OF ECZEMA SEBORRHOICUM.

Read in the Section of Dermatology and Syphilology, at the Forty-third Annual Meeting of the American Medical Association, held at Detroit, Mich., June 7, 1892.

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Eighteen years ago I had the honor of presenting to the American Medical Association, which then met in this same city of Detroit, an article upon "The Management of Eczema," which, as I have since learned, was the first article relating to diseases of the skin which had ever been printed in the Transactions of this Association. It has seemed therefore very fitting to again present here an article upon the subject of eczema, relating to a phase of it which was entirely unknown at the time I read the article alluded to.

In my former paper I attempted briefly to go over the subject of the nature of eczema and its proper treatment, and I dwelt largely upon the constitutional origin of the disease and its management by diet, internal medication and external applications. I endeavored to show that the eruption upon the skin was very commonly but an external manifestation or result of systemic changes, and that its treatment by no means related alone to the administration of arsenic and the application of zinc ointment, but that to properly care for the disease, every element should be taken into consideration which bears upon the life and health of the individual.

The position then taken I believe still to be wholly correct, and the title given to my article at that time, "The Management of Eczema," represents well the care and thought necessary to properly cure the disease.

On the present occasion, however, I wish to call attention, as clearly as possible, to certain features belonging to an eruption, certain cases of which at that time would have been classed as eczema, and would have been treated wholly as such, but which later years, and especially the last two or three, have shown to be a condition of the skin quite different at times from that ordinarily and properly called by the name of eczema. I refer to that form of skin affection which has now entered into dermatological literature under the name of *eczema seborrhoicum*. The credit is wholly due to Unna, of Hamburg, for first having called attention to this condition of the skin, and for having persistently advocated its claims for a number of years, until now I think it is thoroughly accepted by the majority of those who have much to do with dermatology.

Undoubtedly the great disease, eczema, has too often been made a receptacle for many diseased conditions which could not be otherwise named or classed, and as the science of dermatology widens, and more accurate knowledge is obtained, the proportion of affections which are thus classified will become materially lessened. In all large statistics of to-day, eczema is found to represent about one-third of all cases. Hebra first clearly differentiated pityriasis rubra and separated it from eczema, with which it had previously been classed. Certain forms of lichen were then differentiated, and lichen ruber, lichen planus, lichen pilaris, etc., were taken from its grasp. Many cases which are now recognized as dermatitis herpet-

iformis would formerly have been classed as erratic or unusual forms of eczema; the same may be said of some other affections.

Seborrhoic eczema has now won for itself a place in dermatology, and it is questionable in my mind if this affection about to be spoken of should really be classed as eczema, so different are some of its phases from those commonly recognized under this name. Many of its phenomena would seem to separate it entirely from this disease; Unna is very certain that it is of a parasitic origin, and in a recent letter to me, said that he hoped very shortly to be able to demonstrate positively the parasite to which it is due. For the present, however, the disease retains its old name, and will be classed as an eczema, although it is more than probable that within some years these cases will receive quite another designation.

According to Unna, the disease begins as a desquamative erythema, similar to pityriasis, and continues as such, or develops into an oozing eczema or into squamous or crusted, psoriasis-like eruptions. When it becomes vesicular, it is chiefly, according to him, from the effect of external irritation. To quote from Unna: "The true and essential cause is the inoculation of the germ, a germ for the most part probably of a vegetable nature. Eczema, however, is only produced when the germ proliferates in the epidermis and its appendages. To effect this it is necessary, according to the parasitic theory, that this affected epidermis should be a good nutrient basis, and this condition embraces actually everything which has been previously reckoned amongst the various predisposing and exciting causes. Between these two groups there exists no sharp boundary, the congenital nature of the skin (heredity), supervening diseases, especially such as alter the nature of the skin secretions (rheumatism, gout), those in the skin tissues, such as take place at the various periods of life (dentition, menstruation, climacteric), and other undercurrent diseases of the skin (acute exanthemata), can all be considered as predisposing causes, or better as preëxisting preparation of the nutrient base; external warmth, and most simple inflammations and stases, as well as the whole legion of external irritants, may be described as exciting causes, or better as accidental preparations of the nutrient base. That which is common to all these causes, *i. e.*, all the causes which have been discussed in the text-books up to this time, is that they can render the skin, and especially the epidermis and the nutritive fluids which penetrate it favorable to the growth of the specific germs." It must be stated here that Unna goes much farther than most of us are willing to go, and believes that the large majority of cases of eczema are parasitic. We can accept his views only so far as they relate to the special form of eruption which we are discussing, namely, seborrhoic eczema.

Unna has long maintained that the origin of seborrhoic eczema is in the scalp, and that a large share of the cases of ordinarily so-called dandruff are due to this cause; and he believes further that the infection of other points in the skin has its starting point from this locality.

While not accepting to the full the views here mentioned, I must state that, after having spent some little time with Dr. Unna, two years ago, I have been led to recognize the disease which he describes as relatively frequent, both in my public and private practice, and large numbers of cases have been so designated and treated by me during the past two years. As an illustration of this, I may mention that among some three hundred cases of eczema seen in private practice during the past year and a half, since I have felt satisfied with regard to the matter, I find no less than seventy-four recorded with the original diagnosis of eczema seborrhoicum, or nearly one-third of the entire number. I may add that later knowledge of various other cases has repeatedly led me to look upon the eruption which I had formerly classed as simple eczema, as really belonging to this form of disease. I think, therefore, that I may safely say that one-third of all the cases which would ordinarily be called eczema may, without error, be designated eczema seborrhoicum.

What, then, are the features whereby we recognize this particular form of disease, if, indeed, it is a separate affection from ordinary eczema? In the first place, I will briefly state what I do *not* consider to belong to this variety:

1. I do not recognize this condition to be an element of any importance in connection with the ordinary cases of infantile eczema. I need not spend time in defining closely what I mean by this term, as all are familiar with the acute or sub-acute eczema of early life, coming very commonly first upon the cheeks of infants, and then upon the hands and forehead, extending over the head, and forming what is frequently known as "milk-crust;" this eruption I believe to be due largely, if not wholly to internal causation, relating to the nutrition of the child, and its nervous organization; time and time again we see the eruption appear with each derangement of its alimentary canal; time and time again the eruption will appear with each accession of a new tooth. This form of eruption, I believe then to be largely assimilative or neurotic.

2. I do not class as seborrhoic eczema those cases of eruption developing in the papular or vesicular form in early adult life, often first upon the hands, or about the head or face, and not infrequently coming upon the lower extremities; these cases I believe to be due to very similar causes to those belonging to infancy, namely, digestive or nervous agencies.

3. I do not ever recognize as seborrhoic eczema the eruption as it appears in middle life, in the red, congested form about the face, in what is known as erythematous eczema, where there is thickening of tissue, very great itching, and occasionally oozing of the surfaces irritated.

4. The eczema of old age coming upon the face and very commonly upon the lower extremities, is commonly due to impeded circulation, and the general lowering of the vital powers when the skin readily yields and becomes inflamed and irritated without any specific cause, and has nothing to do with seborrhoic eczema.

Lastly, I do not recognize as seborrhoic eczema the many cases of purely localized eruption, such as those seen upon the hands of washerwomen, and those engaged in irritating occupations, nor those which have their origin in external irritants of various kinds applied to the skin, nor those due to sluggish circulation connected with occupations requiring long standing, or those dependent upon varicose condition of the blood vessels.

All these conditions yield when properly treated by quite other means than such as are applied to

seborrhoic eczema. In infantile eczema, time and time again I have seen the disease entirely disappear slowly, with the internal administration of large doses of arsenic, without any external application whatever. In multitudes of cases in young, adult life and even in the aged, I have seen the eruption vanish when proper attention was paid to the various causes which are recognized as predisposing or exciting agencies. Every day we see eczema yielding to alkaline treatment, followed by proper tonics, when local measures, even of the most approved character have failed entirely to give relief.

But on the other hand, we do continually see cases of eruption, which formerly were classed as eczema, present very different manifestations at one time or another from those already mentioned, and we find them yield to a very different class of remedies, the credit of whose introduction and elaboration belongs to Unna. These we recognize as seborrhoic eczema, as will be detailed more fully later on.

Mention has already been made of the fact that Unna believes seborrhoic eczema to have its origin mainly, if not entirely upon the scalp, and I have repeatedly seen him base his diagnosis upon the fact that the patient had been subject to dandruff for a greater or less period of time. To this aspect of the case I have given very considerable attention, and while I am by no means prepared to go as far as he does in regard to basing the diagnosis upon such a feature, I can verify the fact that in a very large proportion of the cases which can be properly classed as belonging to this disease, this feature has existed to a more or less marked degree. I can also testify to the fact of the very greatest benefit accruing from the thorough and proper and systematic treatment of the scalp in these cases, although I cannot quite agree that when the trouble returns to the scalp the disease appears elsewhere by infection.

In the most marked cases of seborrhoic eczema of the scalp, there may readily be made out a greater or less development of tolerably well-defined, reddish patches scattered through the surface, often extending down beyond the margin of the hair, especially upon the forehead, in festoons of eruption, presenting a moderately reddish base with a considerable amount of more or less greasy scaling upon them. In the lighter cases, these sharply defined margins are not seen, but the scalp is covered to a greater or less degree with a layer of scales which are rather firmly adherent, but which continually dust off upon the shoulders as dandruff. Upon non-hairy parts the eruption is apt to assume more or less circinate shapes, forming circles or parts of circles of more or less definite outline, in size varying from a small point, up even to an inch in diamter. Within the ears the disease will often be manifested only as an undefined, diffused scaliness, accompanied with considerable itching.

The most characteristic and well-defined eruption of seborrhoic eczema is commonly found upon the chest, representing a condition which was formerly known as seborrhœa. The patches are often in the form of circles, touching one another, of a reddish yellow, slightly raised above the skin, and covered with a greasy yellow scale. These may extend over the back as well, and in a case recently under my observation the eruption, which was very extensive in the scalp, almost covering it with a coating of scales, extended also over nearly the entire body and limbs, presenting hundreds of fairly defined circles, some of them up to an inch in diameter. In many places the eruption was not very well-defined, but the lesions ran into one another forming a rather diffused and irregular scaly surface. In this instance the patient was absolutely and entirely freed from the eruption by local treatment alone, of a character which will be described later.

In another instance, also in a female, the patches were much larger, more or less cleared in the centre, of a more dusky red, and with a considerable amount of scaling. In this instance it was very interesting to note that while on one arm, where the disease was very characteristic, it had yielded to local treatment, on the other arm, when rheumatism attacked the wrist, the eruption in the neighborhood became fiery red, formed papules and vesicles, and finally exuded, presenting the appearance of ordinary acute eczema. This was not due to any local application which had been made for the rheumatism, for nothing had been put upon it, except the treatment for the eruption; but the inflamed condition in this location was due as I believe, to the greater activity of the blood vessels of the part, and to the circulation of the acid products of rheumatism in the skin.

It is not to be supposed, however, that the lesions of seborrhoic eczema are always so well-defined and sharply outlined as might be inferred from what has been said; in many cases the patches of the disease are very indefinite in shape, present more or less of thickening of tissue, and give off relatively little scaling.

The itching of seborrhoic eczema is not ordinarily very great, although there is always more or less irritation, causing the patient to scratch somewhat; but seldom if ever, in my experience, does it call forth the terrible lacerations which are sometimes induced by true eczema, attended with great infiltration of tissue or the formation of deep vesicles.

The characteristic features of this eruption may be summed up as follows:

1. Seborrhoic eczema, in its most characteristic development presents well-defined, reddish or reddish yellow patches of varying size, generally with rounded outlines, though also apt to be irregular in shape; some lesions may be papular, and occasionally large areas, of several square inches are found. There is little if any thickening of the skin, and seldom moisture, unless the part has been much irritated.

2. On the scalp the disease is apt to be very diffuse, presenting mainly a scaly or pityriasic condition, producing much or little dandruff. When this condition has long persisted there is apt to be baldness.

3. It is claimed by many that the eruption begins thus on the scalp and extends downwards by infection; its development is often found to support this view, and it is most frequently found on the face, centre of the chest, back, arms, etc.

4. There is generally a considerable amount of itching to seborrhoic eczema, especially on the scalp, but it is seldom of that intense and distressing character belonging to inflammatory eczema, with papules and vesicles, or even with erythematous lesions.

5. Seborrhoic eczema appears at times to be moderately contagious.

The *diagnosis* of eczema seborrhoicum should not be very difficult, if due regard is had to the disease as it has been described; in some instances, however,

one will be somewhat doubtful as to whether an eruption should be thus classed as an eczema, or whether it belongs to some quite different affection. Certain cases of *tinea versicolor* will resemble eczema seborrhoicum, when the patches are small and scattered over considerable surface; but on the other hand there is a certain tawny or fawn color to the former disease which does not belong to the latter, and there is a peculiar, slippery feeling to the patches of tinea versicolor which is quite different from that experienced in eczema seborrhoicum. If there is any doubt the microscope very readily settles the question by exhibiting the characteristic branchlike mycelium or groups of spores belonging to tinea versicolor, which, of course, would never be found in the other eruption.

Certain cases of very superficial *tinea trichophytina* will sometimes resemble eczema seborrhoicum quite closely; but they are more sharply defined, the scaling is of a rougher character, upon the non-hairy parts the circles are more sharply cut and tending to clear in the centre, and finally the microscope shows a gross parasite in the tinea eruption which is absent in eczema. Upon the scalp tinea will always manifest itself by the broken hairs, which are absent in eczema seborrhoicum.

The diagnosis between *psoriasis* and eczema seborrhoicum will sometimes be not a little difficult, especially when the lesions of the former disease are quite superficial, when they tend early to clear up in the centre, and when they do not manifest their characteristic scaling to a marked degree. In some instances it is only possible to decide the matter absolutely by a therapeutic test, when the remedies appropriate to eczema seborrhoicum will readily clear up the eruption, and will not affect to any great extent that of psoriasis. In almost every instance, however, the very characteristic location of psoriasis upon the extensor surface, and the tendency of eczema seborrhoicum to attack the flexor surface, will aid in the diagnosis. Some of the more superficial, large and scaly papular and tubercular *syphides* will occasionally resemble eczema seborrhoicum, but generally there are other features which aid in completing the diagnosis.

Such being then the clinical features and diagnostic differences of the eruption under consideration, it remains to say a few words in regard to its nature and nosological position before speaking of its treatment.

As mentioned before, Unna hopes to shortly demonstrate the parasite causing the eruption. As is well known, there are a very large number of microorganisms to be found continually on the skin, both in health and disease; if I remember rightly, some thirty or more distinct forms have been demonstrated. Some of these may be, and undoubtedly are, pathogenetic; the larger number of them are, as far as is known, perfectly harmless. As these all belong to the forms of micrococci, and are quite different from the easily recognized vegetable parasites of the skin, and are determinable only after the most painstaking operations, and with very high power lenses, it is readily seen that the accurate determination of this question is beset with the greatest difficulty; it is moreover doubtful if ever the processes could be so simplified that the general practitioner could determine the organisms in the same manner as those of the ordinary vegetable parasitic diseases are readily demonstrated.

But on the other hand, the clinical evidence points strongly to the presumption that the eruption is due to an external cause, as does also the treatment, and the same would also indicate this cause to be microphytic in character.

We are not, however, from our present knowledge of the eruption, prepared either to give it a new name, or to separate it entirely from eczema, inasmuch as in some cases the eruption may, in certain portions at least, closely resemble eczema, arising apparently from other causes. We are certainly not ready yet to place it among the parasitic diseases. As far as is yet known eczema seborrhoicum does not appear to be contagious in the ordinary sense of the word, although if due to a microörganism it must, to a greater or less degree, be of this character, though so slightly as not to attract attention clinically.

The *treatment* of eczema seborrhoicum is relatively simple in the main, and although individual cases may occasionally give trouble, the eruption commonly yields very well, for a time at least, to rightly directed external measures, and in this respect stands often in striking contrast with other forms of eczema.

Thus far little, if anything, is known in regard to any special *internal* treatment for this phase of eruption, other than that belonging to eczema in general. Undoubtedly the special microörganism, if such be its cause, requires a specially fitted soil on which to find lodgment and flourish; for, as before remarked, there are many, many varieties or forms of microorganisms found on every skin, and all are undoubtedly exposed to their action, if only the tissues are in a condition to be attacked.

The internal treatment, therefore, should not be neglected, but every endeavor should be made by hygienic, dietary and therapeutic measures to place the system and the skin in the most healthy condition possible; in other words, all the means appropriate for ordinary eczema most assuredly aid in curing the eruption, and rendering the patient immune from the same.

The *local treatment* of eczema seborrhoicum is immensely important, for with rightly directed measures the eruption generally yields quite readily, while otherwise it is apt to be extremely rebellious. To Unna, again, belongs the great credit of having introduced an efficient treatment for the eruption under consideration. Believing strongly in its parasitic nature, he has advocated mild parasiticides, and in them we find the means of cure. It is well, however, to remember that the eruption is still called *eczema* seborrhoicum, for that indicates in a measure the delicate or irritable condition of the skin, and the necessity of caution to guard against too great stimulation or irritation.

The two remedies which Unna emphasizes as of value in this eruption are resorcin and sulphur, but other mild parasiticides are also often of value, such as diluted white precipitate ointment and other weak mercurial preparations, and in certain cases tar and its derivatives prove of much service, especially when there is much itching.

The most brilliant results in this eruption are often obtained upon the scalp, where in the majority of cases it will yield with great facility to resorcin properly applied. The formula which I most commonly employ is as follows: ℞. Resorcin ʒij, spiritus vini rectif. ʒiij, glycerini ʒiv, aquæ rosæ ad ʒiv. This is to be applied by means of a medicine dropper

inserted among the hair, so that the scalp itself is thoroughly moistened with it, morning and night, it being gently rubbed into the roots of the hair by the finger tips. After five days the scalp is thoroughly shampooed with tincture of green soap (℞. Saponis viridis ℥ij, spts. vini rectif. ℥j), and thoroughly rinsed and dried with hot towels, after which the scalp is again wet with the resorcin lotion. These applications are continued for a week or so, night and morning, when the shampoo is repeated, and the resorcin lotion immediately reapplied; after this, generally, one thorough application each night is quite sufficient to keep the scalp free from disease.

In some cases, however, the resorcin is not well borne in the strength mentioned, while in others it may be somewhat increased. When it is not well borne, a mild white precipitate ointment, ten to twenty grains to the ounce will generally act well, though in some cases it will be necessary to use a tannin and carbolic ointment alternately with the resorcin.

Upon the non-hairy parts the same lotion will often act very well, but more commonly an ointment is required. In order to demonstrate the power of the resorcin I have frequently employed it most satisfactorily alone, in cold cream or vaseline, in a strength of 4 or 5 per cent., but commonly it is added to zinc ointment, as forming a more solid base.

When the eruption resists, sulphur is added to the ointment, (℞. Resorcin ℈j, sulph. precip. ℥ss, zinci oxid. ℥ss, unguent aquæ rosæ, ℥j. ℳ.) and under this the lesions will often fade very rapidly.

If the eruption becomes moist and inflamed, then usually ointments are not so well borne, and recourse is had to the well known calamine and zinc lotion, to which a little resorcin is added (℞. Resorcin, ℥j, acidi carbolici, ℥ss, pulv. calaminæ prep. ℥j, zinci oxidi, ℥jj, glycerini, ℥iij, aquæ calcis ℥iv, aquæ rosæ, ad fl. ℥iv). This is freely sopped on the part several times daily, the powder in it being allowed to adhere and form a protective coating over the inflamed parts. If the coating becomes too thick, or the surface hard or cracked, then a little vaseline or cold cream rubbed gently over it will convert it into a soothing ointment, after the removal of which the lotion may be reapplied later.

In some cases of eczema seborrhoicum a long continuance of the disease, and the scratching incident thereto will have produced thickened patches exactly like those having their origin from other causes. In these cases quite other treatment may be necessary, and tar ointment properly diluted, oil of cade, diachylon ointment and even some of the stronger mercurials may be necessary to secure absorption of the effused lymph.

As may be inferred from what has preceded, the *prognosis* of eczema seborrhoicum is generally a very favorable one; and in this respect, as regards the duration of treatment at least, it is very different from that of eczema of neurotic or internal causation.

The limits of the paper have prevented my going into the subject of eczema seborrhoicum as fully as I should have wished, and I should have liked, moreover, to have adduced some striking personal cases which might make some points more clear. I have, however, attempted to present the subject as clearly as possible, and trust that I have been able to interest you in this phase of eruption, for which so much can be done if properly understood, and I hope that the subsequent discussion will throw yet more light on the subject.

It will be seen that I still call the disease eczema seborrhoicum, but I have yet some doubt as to whether it belongs properly to eczema as we understand it from literature and the experience of the past. I must, however, reiterate my opinion that although, as I have mentioned, the eruption yields largely to local treatment I believe that we will fail to do our patients the largest amount of good if we regard it as a purely local eruption, and for the permanent cure of the disease I believe that thorough internal treatment is necessary in combination with the local measures which have been mentioned.

4 East 37th Street, New York.

THE THIRD ANNUAL CONFERENCE OF THE HEALTH OFFICERS OF THE STATE OF INDIANA.

This conference was held at Indianapolis, Ind., April 27, in the Board of Agriculture rooms of the State House. It was a very interesting session.

The roll call showed sixty-eight secretaries present and about forty-five counties represented.

THE NECESSITY FOR PREVENTION AGAINST CHOLERA.

BY JAMES F. HIBBERD, M.D.,
OF RICHMOND, IND.

Asiatic cholera is indigenous in a certain part of maritime India, and is annually transported to other parts of the same country, and at longer periods to regions outside of India, and occasionally spreads over the civilized world wherever travel and commercial traffic extend.

In India holy Mohammedan shrines are located in regions where cholera is epidemic, and in some years nearly all pilgrims who visit these shrines—and they are legion—contract cholera, and 80 per cent. of those attacked die, and even in more enlightened countries, where the inhabitants are negligent and filth abounds, 80 per cent. of those seized perish, while at other times and places where more care exists, or the epidemic is milder, 30 per cent. is the limit of fatality.

A few hours often suffice to carry a stout individual from apparent good health through the tortures of cholera to death, and in all fatal cases a few days at most cover the issue, if acute.

The disease is readily portable. For a year it has existed in Western Asia and in many places in Europe, but especially in those parts abroad where commercial traffic, travel and emigration have had their higher development, making it altogether probable that the shores of America will be reached through some of these channels in the near future.

Within the last decade our knowledge of cholera, its cause, how its cause becomes disseminated and impregnates its victims, and how the dissemination of its cause may be averted and its impregnation of persons prevented, has advanced so rapidly as to be now almost perfect.

It is the fullness of our recognition of the cause of cholera; of its ready transportation and the channels through which it travels; of the lines and methods by which it invades new territory; and of its easy arrest and destruction by measures within our reach, that places upon us an imperious necessity to exert ourselves for its prevention.

To prevent cholera we must emasculate its cause,

and to be able to emasculate its cause we must study the nature, attributes and power of that cause. Time does not admit of an extended discussion of this subject on this occasion, and I will therefore content myself by presenting my views in the similitude of a series of aphorisms which, while seemingly severely dogmatic, are, in my estimation, fully supported by the latest investigations of competent observers.

Bacteria are immense numbers of microscopic vegetables so small that the highest magnifying power has found specimens too minute for correct description. Medical bacteriologists for convenience distribute these microscopic plants into three classes —a round one is a micrococcus, a straight filament is a bacillus, and a spiral filament is a spirillum. These designations signify nothing but form and are simple aids to reference, but other attributes are many and important to sanitarians. Bacteria are found everywhere; in the water, in the atmosphere, in the soil, on and in man and all animals, and on everything man and animals eat. Most of them are harmless, many of them are salutary and contribute to animal health and longevity, including man, and only fifteen of them have so far been satisfactorily proven to be the direct cause of disease in man, each of which excites a specific disorder that has no other origin. It is on these lines that physicians and sanitarians investigate and consider bacteria, but botanists make extensive subdivisions of them into genera, species and varieties according to the rules of botanical science.

The essential factor in the genesis of cholera is the spirillum choleræ Asiaticæ, almost universally known by the name, comma bacillus, given it by Koch. It is a small microbe about the $\frac{1}{25000}$ of an inch in length and one-third of that in transverse diameter. We can hardly conceive of a living thing so minute. It would require 1,000 of them, placed end to end, to extend $\frac{1}{25}$ of an inch, and a sphere of the size of a drop of ordinary fluid would contain 523,600,000 of them. This microbe entering the alimentary canal of man, finds in the small intestine the conditions suitable for its development and reproduction, and it at once enters into an active and prosperous career, multiplying so rapidly as to be almost beyond conception. It breeds by each spirillum dividing itself into two spirilla and each of these into two more, and so on. This division has been seen to take place in the laboratory in twenty minutes after a spirillum had been planted, placed in a suitable culture medium; but let us suppose such division to be complete once an hour, a simple calculation will demonstrate that at the end of twenty-four hours the descendants of this one microbe would number 16,777,216. As it must be a rare thing for a person who swallows such a microbe to swallow only one when a drop of fluid may contain millions, we can readily understand why, when a person becomes affected with cholera, he is so quickly, so severely and so dangerously diseased. The life tenure of the cholera spirillum is not known; probably whenever one of them, of whatever age, divides there are two young ones, and this division and regeneration continues as long as pabulum is abundant and environment satisfactory. If a garment in Russia were soiled with cholera discharges, wrapped up moist, packed in a trunk and transported by easy stages to Indianapolis, it would reach its destination charged with living, active germs of cholera.

THE TENDER MICROBE.

This microbe is, however, a delicate plant, and can propagate only within relatively narrow limits. It can not survive in a temperature above 126° F., nor below 57°, and its active life is confined to a temperature between 70° and 108° F. It cannot multiply, though it can live, in pure water, but in water containing organic matter in solution it flourishes in a high degree, as it does also in damp soil containing organic matter. Hence foul lakes, ponds, rivers, wells and cisterns, and wet soils, drains and gutters, and sewage are favorite habitats and breeding places for the cholera spirillum. As already stated, it can not live in a temperature below 57° nor above 126° F. Drying kills it, the most contaminated clothing, bedding or other fabric, or soil, when completely dried, are clear of every living cholera germ, nor can it survive in acids or strong alkalies. It is, in fact, a very tender and fastidious plant, must have temperature and food just suited to its taste, or it will perish. Surely an enemy so dreaded as the cholera spirillum, whose frailty we clearly understand, and whose many vulnerable points we well know, ought to fall an easy victim to our cultured and energetic germicidal skill.

Prevention of cholera in this country demands consideration of four distinct problems: 1. To keep the spirillum from entering the United States. 2. To prevent its transportation from any focus it may establish in the interior of the country. 3. To protect the individual from receiving the spirillum into his intestinal canal; and fourth, to create and maintain in each individual such condition that though he be invaded by the spirillum he will successfully resist it.

Touching the first preventive problem it may be positively asserted that if it can be successfully accomplished, there will be no ground for further anxiety. Cholera is indigenous only in India, and whenever it is found in other parts of the world it has been transported there from India, directly or indirectly. The duty of securing the exclusion of the cholera spirillum from the United States devolves on the authorities of the Nation, the States and the municipalities serving on the frontiers of the Republic, and these authorities are so alert, so thoroughly posted in the requirements of the situation, and so well equipped to make their work effective, that we may safely rely on them to do whatever can be done in this behalf. But their utmost vigilance may fail, and it is obviously the reasonable duty of the States and communities of the interior to take such precautions in advance as would be demanded if it were certain that the scourge would visit every locality.

To limit the diffusion of the cholera, should it enter the country, is the second problem of prevention. In this behalf we have but to study the character and habits of the cholera spirillum to realize that the first duty exacted in anticipation of the cholera is to clean up all foul places; not that filth causes cholera directly, but we have seen that the spirillum breeds in all neutral fluids that hold organic matter in solution, and we must, to the extent of our ability, rob it of a breeding place. And furthermore, filth vitiates the atmosphere, and undermines that sound health upon which every one who chances to receive a cholera germ into his intestines must rely to resist its pathogenic influence.

If, notwithstanding these prophylactic precautions, a case of cholera appear in any community, the pa-

tient should be isolated at once and be waited on by intelligent and industrious attendants, who would diligently care for all discharges and promptly disinfect them with heat, dry or wet acid or other disinfectants. If these suggestions be accurately and without accident executed in behalf of the first cholera patient in any locality there will not be a living spirillum from him left to generate a second case.

To prevent a person from swallowing the cholera spirilla in a virile state when he is in their presence is the third preventive problem, and is not a difficult thing if such person clearly comprehends the nature of these spirilla, and is thoughtful enough to conduct himself according to the light and knowledge of the day respecting them. Cholera is not contagious; *i. e.*, it does not pass directly from the ailing to the well, like small-pox or scarlet fever, for the reason that the bacilli of these disorders are found on the surface of the body, having been carried there by the blood, and may be communicated by direct contact, or may be dessicated, float in the air, and be carried by currents to the attendants, while the cholera spirillum, like the bacillus of typhoid fever, is harmless unless conveyed to the small intestines through the mouth and stomach; and further, like the germ of typhoid fever, it never appears in the blood nor other humor of the body except the secretions of the bowels, and these are so easily disinfected that no discharged spirillum ought to escape destruction. The germs of some diseases may float in the air and infect those to whom they are borne, but not so with the cholera spirillum; when it becomes dry enough to be volatile its vitality is gone. Accordingly, the agent which carries the germ of cholera must be a fluid, and in fact, drinking water is the most general, though not the exclusive means of conveying cholera germs to individuals, and all danger from this source may be avoided by drinking only water that has been boiled and afterward protected from contamination, or such as has been made sour by lemon juice, vinegar, tartaric acid or other vegetable or mineral acid. Some years since a learned and thoughtful medical superintendent of a hospital for insane women in Philadelphia arrested an outbreak of cholera in the institution by having all the inmates drink systematically of a so-called lemonade made of sulphuric acid. Persons engaged in washing fabrics contaminated by discharges from the bowels of the victims of cholera may become infected by thoughtlessly passing a soiled finger to the lips, or a drop of the washing fluid—perhaps containing millions of spirilla—may be splashed into the mouth and, unless immediately neutralized by washing out the mouth with a vinegar or other disinfecting lotion, may pass into the intestines and inaugurate the disease.

FOOD SHOULD BE COOKED.

Uncooked food may also carry the germs into the bowels if not purified or proper care taken, but this danger is minimized for the reason that food excites gastric juice, gastric juice is acid, and a cholera spirillum can not pass a stomach that contains an acid fluid. In the matter of establishing and maintaining in the individual a power or condition that will resist the pathogenic energy of the cholera spirillum, which is the fourth preventive problem, there is no mystery and but little art; to attain and enjoy average good health, physical and psychical, covers the whole ground. Every person in a civilized community is more or less exposed to the causes of disease, but by a natural law of the human organization such a resisting power stands always in defense, so that the many escape; only the few succumb. Without claiming that the person in good health has no liability to cholera, it is sound doctrine to hold that good health is the chief factor in the preservation of those who escape the cholera while exposed as are their fellows who suffer.

Accepting this dictum, it follows that a person in health when cholera invades a community should make no change in his habits of diet, exercise or rest, nor should such an one take any drug or preparation to improve his powers of resistance, under the false and mischievous conceit that good health can be made better.

Much error exists in the popular mind—and in some professional minds also—regarding food during cholera epidemics. Many insist on wide departure from ordinary articles, however good and satisfactory they may have been before cholera was present, with the frequent result of disturbing good health and depressing the resisting power of the system to the extent that admits an attack of cholera that otherwise would have been avoided.

However important it may be that improper food should be discarded, the general rule should be that whatever was found safe, sound and sustaining when cholera was afar off, is good food when cholera is at our door or in our dwellings, and the same rational rules should guide in the matter of beverages; what is best for everyday health should be adhered to on the approach and in the presence of cholera.

While insisting on the proper physical conditions in man and his surroundings as preventive of cholera, I do not forget that his psychical status, equally, on its approach, adds immeasurably to his liability to have it. Fear subtracts from man's resisting power as much as bad food or unclean environment, perhaps more, and anger or other emotional excitement is not far behind it in mischief. The true rule should be to make every rational preparation for a visitation of cholera, then calmly wait, each trusting in full faith to his own manhood and the mercy of the great Father of all.

Should some one inquire how it is, granting all these statements to be true, that cholera can exist at all, my answer would be that in the first place the facts herein set forth are not universally recognized; and secondly, even where fully appreciated and their application attempted with intelligent earnestness, there are so many dark corners that defy complete inspection, and not infrequently accidental or intentional deception permits the germ to pass the lines of defense unnoticed.

And still further, cholera is frequently so sudden in its onset and so rapid in its career, especially in discharges from the bowels, that many sufferers, notably the poor and isolated, scatter untold millions of the germs in and about the premises where they are seized before they are aware that they have the cholera or receive proper attention, and thus the disease perpetuates itself in spite of sanitary knowledge and the most untiring activity.

Dr. Hibberd's lecture before the convention of health and sanitary officers caused considerable discussion. The statement that cholera could not

survive a temperature higher than 126° nor lower than 57° Fahrenheit was especially questioned, and the fact that it lived through a Russian winter was cited to prove the incorrectness of the statement. Prof. Berg wrote Dr. Hibberd for a clearer explanation of his position, and received the following letter:

RICHMOND, Ind., May 5, 1893.

D. N. Berg, Indianapolis, Ind.:

Dear Sir:—Your note of the 3rd inst. states that parties listening to my address before the sanitary conference on the 27th ult. have since made a double inquiry, which may be restated thus: If my figures of the temperature limits of the life and activity of the cholera spirillum are correct how is it that cholera has prevailed to some extent in Russia all winter? I reply, there is a slight but immaterial difference in the observations of bacteriologists touching the extremes of temperature within which the cholera germ may live and multiply. Sternberg in his great work, "Manual of Bacteriology," published within the year, says, page 504: "The thermal death point of the cholera spirillum in recent cultures in flesh-peptone-gelatine as determined by the writer (1887) is 52 degrees c." The equivalent of 52 degrees centrigrade is 125.6° Fahrenheit. On page 501 he says the germ "does not grow at a temperature above 42 degrees or below 14 degrees c," equivalent to 107.6 degrees and 57.2 degrees Fahrenheit respectively, and on the same page he describes the "gelatine plate culture at 22 c," equivalent to 71.6° Fahrenheit. Omitting fractions these are the figures used in my communication to the sanitary conference.

Touching the cholera in Russia it will be observed that the extent of its prevalence during the winter has been but a fraction of its extent last summer and autumn. This was doubtless due to the frost limiting its transportation and killing all germs exposed to its direct influence.

But the houses of the Russians, including the living rooms, cookeries, most of the mercantile establishments and industrial institutions are kept warm, in most of them probably the temperature not at any time falling below the fatal 57°, and the germs thus preserved finding their way to human intestines meet with temperature and other conditions suited to their rapid development. This is the whole story of winter cholera in Russia and every other country that has a winter temperature.—Yours respectfully,

JAMES F. HIBBERD.

SOCIETY PROCEEDINGS.

Medical and Chirurgical Faculty of Maryland.

Ninety-fifth Annual Meeting held April 25, 26, 27, 28, 1893.

Dr. L. McLane Tiffany delivered the President's address,

THE TREATMENT OF NEURALGIA OF THE TRIGEMINAL NERVE WITH SPECIAL REFERENCE TO THOSE MEASURES OF RELIEF WHICH ARE OBTAINED BY INTRA-CRANIAL EXCISION OF THE GASSERIAN GANGLION.

It is not necessary to define neuralgia, but a trigeminal neuralgia has certain peculiarities. The anatomy of the Gasserian ganglion and its three branches is known to all, but the difficulty of getting at them in the living person is little appreciated except by those who have tried. This neuralgia differs from ordinary neuralgia in being paroxysmal and is probably the most painful that one has to do with. There are periods of absolute quiet between the paroxysms. The changes seen in the parts supplied by this nerve and its branches are very slight in proportion to the pain the patient feels. There is generally no change at all or at times a slight glazed appearance of the skin and very rarely there has been atrophy of the muscles supplied by this nerve.

The age at which this form of neuralgia occurs is a most important etiological factor. It generally occurs in persons over forty, but one case in a woman of twenty-seven has been reported. Another etiological factor is that there are certain points of pain where the nerve makes its exit through the bone. When the surgeon has been called in, the treatment by drugs has been exhausted. Quinine and arsenic are drugs that do the most good and it was formerly supposed for this reason that these neuralgias were malarial, but the more recent discovery of the plasmodium malariæ has shown that this is not always so. The next best drug is aconitia pushed to its full physiological effect; also antipyrin and antefebrin have been used with good effect. The surgical methods are section of the nerve, stretching, and excision more or less far back. These are the three surgical methods used at the present day. Excision of the nerve was first done by Carnochan in 1858, and his operation was classical. The patient on whom he operated was a physician of the State of Maryland, in Caroline county. His operation was successful. Obalinski operated on a case several times but relief was not permanent. There are numerous ways of getting at the nerve. We may take it from in front or from behind. Rose and Anderson of Chicago, were the first to take it from behind. Horsley has also done it in this way.

Tiffany has operated twice in the head for intractable neuralgia. Both cases had been operated on before and one several times. In one case excision of the upper jaw nerve had been done. In his first case, which was a woman, he went through the side of the head, exposed the side of the head, raised up the dura mater until he arrived at the middle division of the fifth, put a string around it so as not to lose it, then scraped back the dura with a dental instrument which he had slightly dulled, and brought the ganglion into sight. It was a novel sight to him to see the Gasserian ganglion exposed to view in a living person. The lower division of the fifth nerve sends a motor branch to the muscles of mastication and in operating it is very hard to leave this motor branch untouched. When the head is first opened the brain swells up and fills the entire space and it seems almost impossible to get at the nerve, but when the shock came on in this case the brain shrunk and got smaller and made operating possible. He did not pour cerebro-spinal fluid or blood into the head as had been recommended, and he did not suture the bone but the fascia. He wounded the dura but no harm came of it. The patient got well with no temperature. There was at first entire anæsthesia of the parts supplied by the middle and upper branches of the nerve, but there was no paralysis at all and pain ceased from the time she went under the anæsthetic and she had no suffering at all. For two days the dressings were soaked with cerebro-spinal fluid from the wound but he took off the dressings and took out the wire on the third day and everything was healed. The patient has been kept under observation for some time after the operation, and she has had no relapses.

The second case was a man, and was much like the one just related, but there was much intra-cranial oozing. The second division of the fifth was involved.

Dr. F. C. Bressler read a paper entitled

A CASE OF ACUTE INFECTIOUS PERIOSTITIS OF THE FIBULA WITH EXHIBITION OF PATIENTS.

Dr. Wm. H. Welch:—Dr. Bressler has mentioned the occurrence of acute periostitis as a sequel or complication of an infectious disease, and has mentioned the various organisms which may be found. A point of interest is whether the complication is due to the same organism that caused the primary disease or to secondary invaders. He had examined a case of periostitis of a rib following typhoid fever and had found the typhoid bacillus in pure culture in the inflamed periosteal tissue. It is probable that the typhoid bacillus is capable of producing this complication. The ordinary pyogenic micrococci are, however, the usual cause of a complicating periostitis.

Dr. W. B. Platt then read a paper entitled "Plastic Surgery of the Face, illustrated with Cases."

This was discussed by Dr. A. K. Bond, who said that these glands could sometimes be reduced by the judicious administration of iron and cod-liver oil.

Dr. Charles O'Donovan read a paper of local interest on "Is Baltimore supplied with Good Drinking Water?" in which he advocated the municipal control of the water sheds of the streams which supplied the reservoirs of Baltimore's water supply while such land could be obtained at a small expense. This was discussed by Dr. Wm. B. Canfield.

Dr. Wm. F. Lockwood read some very interesting "Notes on Measles from Seventy-nine Cases in an Institution." This was a statistical report with the course of the cases and the complications.

Dr. R. B. Norment of Hampden, asked whether he noticed any great interval between the onset of the disease and the appearance of the eruption, and whether the length of time bore any relation to the severity of the disease. He had noticed that when the outbreak of the eruption was long delayed the case was generally worse.

Dr. Lockwood replied that he did not notice any such thing referred to by Dr. Norment in the cases he had reported; in one case the eruption did not appear until the 12th day and yet the case was very mild and ran its course without complications.

Dr. W. T. Howard, Jr., read a report of

A CASE OF DIPHTHERIA OF THE HEART.

A man thirty-four years old was admitted to the Johns Hopkins Hospital on November 7, 1892. He was a laborer. On admission he had weakness, diarrhœa and pain. His family history was negative; he was well built, and said he had never been ill before; he had temperature of 101½, pulse 86, lungs were normal, apex beat in fifth intercostal space, heart sounds clear, after three days his temperature was 100° in the morning and 103° in the evening; his spleen was not enlarged. The man grew worse and died on the 17th day of his stay in hospital. At the autopsy there was found a large thrombus in the mitral valve of the heart and extending into the cavity; the whole spleen was an infarction and there were numerous infarctions in the kidneys. Cover slip preparations were made from this thrombus in the heart and an organism was found morphologically indistinguishable from the Klebs-Loeffler bacillus. Cultures were made with the same result. His bacillus has not so far killed animals but it is a pus producer. Its first action seems to be death to the cells.

Dr. Wm. H. Welch: Dr. Howard's observation is one of unique interest. It recalls the old name of diphtheritic endocarditis which, however, was based on anatomical resemblances. The bacillus found in abundance and in pure cultures in the cardiac vegetations, the splenic and the renal infarction differed in no respect morphologically or in cultures from the Klebs-Loeffler bacillus of diphtheria. It had been carefully studied, not only by Dr. Howard and Dr. Welch, but also by Dr. Abbott of Philadelphia, and Dr. Councilman of Boston. The failure to prove it pathogenic to guinea pigs does not suffice to distinguish the bacillus from the genuine bacillus diphtheriæ, for it has been shown by Roux and Yersin, Abbott and others that the latter may be also devoid of such pathogenic power at the time of isolation in cultures. Dr. Howard's case is the first to be recorded in which the bacillus diphtheriæ or an organism closely resembling it has been found as the cause of malignant endocarditis. This observation is furthermore of interest as an example of the penetration into the circulation and the internal organs of the bacillus of diphtheria.

Dr. Wm. Lee Howard: To what extent are the endothelial cells destroyed? What percentage of them are destroyed?

Dr. J. C. Harris: Were there any signs that the man died of syphilis?

Dr. W. T. Howard, Jr.: Wherever the bacilli came into contact with the tissues the endothelial cells were completely destroyed. The man denied ever having had syphilis and even said he had never been sick at all and there were no signs of syphilis at the autopsy.

Drs. George H. Rohé and J. Percy Wade, read a conjoint paper on

THE HYPODERMIC INJECTION OF SOLUTIONS OF MAGNESIUM SULPHATE AS A PURGATIVE.

The authors had had excellent results in producing purgation by the hypodermic injection of small quantities of magnesium sulphate. In reply to Dr. H. M. Carter, Dr. Rohé said the stools produced by this means were characteristic stools of the salt.

Dr. Edward Anderson of Rockville, then read a paper on "Calomel."

Dr. John S. Fulton of Saulsbury, reported

A CASE OF SUBCUTANEOUS EMPHYSEMA COMPLICATING MEASLES.

Dr. Wm. H. Welch reported briefly the results of an autopsy which he had made upon a case of pertussis with general subcutaneous emphysema resulting from laceration of the lung tissue and the entrance of air into the interstitial tissue of the lung, the root of the lung, the mediastinum and thence into the general connective tissue of the body. Dr. Northrup of New York, had published an interesting paper upon interstitial emphysema resulting from whooping cough.

Dr. W. A. B. Sellman then read a paper on

THE TREATMENT OF METRITIS AND ENDOMETRITIS BY THE ELECTRICAL CURRENT,

in which he referred to cases treated by himself by this means and advocated its use in cases where many would use the knife.

Dr. H. A. Kelly said he differed materially from the opinions just set forth by Dr. Sellman and it was important for men to differ in order to test a method. He does not believe in this kind of treatment. He does not think that such a condition as chronic ovaritis exists. He has seen cases injured by this method of treatment.

Dr. Sellman replied that he knew from experience that there was much good in this method of treatment and as for saying there was no such condition as a chronic ovaritis, why should the ovary not be chronically inflamed? Do we not have a chronic nasal catarrh?

Dr. H. A. Kelly then gave a short history of

MODERN GYNECOLOGY, ILLUSTRATED WITH STEREOPTICON VIEWS.

The views had been taken to show how he operated at the Johns Hopkins Hospital and very well exhibited the various stages of an operation from the entrance to the operating room, the cleansing of the patient, the anæsthesia, to the closing up of the wound and the result.

Dr. A. K. Bond then read an article entitled "The Present Status of Drug Therapeutics as applied by the General Practitioner."

The special subject was then taken up. It was on

PUERPERAL INFECTION WITH SPECIAL REFERENCE TO AUTO-INFECTION.

Dr. J. E. Michael spoke on the Etiology and Prophylaxis, Dr. J. Whitridge on the Bacteriology and Dr. T. A. Ashby on the History and Treatment. This was discussed by Drs. Wilmer Brinton, W. S. Gardner and L. E. Neale. There was very little new brought out except the results of Dr. Williams' bacteriological studies which tended to show that

puerperal infection was due to no one organism but that several pyogenic organisms and others might be the cause. The general opinion seemed to be that while auto-infection was possible, hetero-infection was much more common.

Dr. William B. Canfield then read a paper on

SOME CLINICAL ASPECTS OF IMMUNITY,

in which he advocated that few persons were naturally immune, that second attacks were by no means so common as was generally believed, and thought that diseases that left no trace were more apt to be reported as recurring than diseases such as small-pox, which left a decided mark. He did not deny second attacks. He thought that drug eruptions such as scarlatiniform erythema are often reported as scarlet fever.

Dr. I. E. Atkinson said that the mistaking of drug eruptions for the eruptive diseases was by no means uncommon. He objected to the term rötheln but used rubella.

Dr. E. M. Schaeffer then read a remarkably clever and interesting paper on "An Ounce of Prevention; or what the Poor Man can do to Escape Cholera—and the Doctor."

Dr. H. J. Berkley read a paper on "General Paralysis in the Negro Race."

The annual oration was then delivered by Dr. Reginald H. Fitz of Harvard University. His subject was

INTRA-PERITONEAL HEMORRHAGE.

The causes are various. It is not always a disease peculiar to woman. Mild and fatal cases occur in man, but not often. Blood vessels may break from weak walls, wounds from without or from crushes. Hidden causes demand prompt attention, as an aneurism, which is irremediable, tumors of the liver, pancreas and other abdominal organs. Hemorrhagic pelvic peritonitis may be caused. The blood is poured out according to the force of the heart and may form a hemo-peritoneum which may prove fatal, or the blood may be absorbed or it may break out, or it may form a hematocele which will discharge the blood to some dangerous place if it breaks. It is very serious if it break into the bladder. The diagnosis of intra-peritoneal hemorrhage is not easy, and an exploratory incision may have to be done. The person suddenly collapses, which may make us suspect this condition even though we can find no physical signs. The treatment depends on the cause. It is more apt to be an aneurism in man and an ectopic gestation in woman. The sudden collapse with the recognition of a smooth, large tumor in the abdomen may cause a suspicion of this trouble, and immediate operation is necessary.

Dr. John C. Hemmeter then read a paper entitled

BIOLOGICAL ASPECTS OF BLOOD AND BLOOD VESSELS.

Blood is something more than a fluid; it is a tissue. The capillaries partake of the nature of glands, and there is no sharp line to be drawn between digestion and absorption. The capillaries, as glands, affect the character of the blood as it passes through them.

Dr. Wm. H. Welch:—The suggestion as to the function of the capillary walls as modifying the action of the blood is a subject to which Heidenhain has given much attention, and his name should have been mentioned, for he deserves the credit. It is evident that the vessels exercise some sort of elective action on the blood, and are not mere filters.

Dr. A. L. Hodgdon then read a paper on

HEREDITARY INFLUENCE; ITS RELATION TO MENTAL DISEASE,

in which he gave in a very interesting way some facts on maternal and paternal impressions, as well as cases of atavism and inherited peculiarities.

Dr. John Morris agreed with much the author said, and said the paper would do much good.

Dr. I. E. Atkinson thought we should be careful how we accepted these facts. The tendency to inheriting peculiarities is very limited, and he referred to the statistics on circumcision.

Dr. Wm. H. Welch:—Weissman cut off the tails of 800 white mice in succession and had not succeeded in making a single exception to mice born with tails. His book devoted to the consideration of acquired peculiarities has just been translated into English. All inherited peculiarities lie in the germ plasm and all the variations can be explained by changes in the sexual cells, and our sexual cells can not be altered by acquired habits. He thinks the weight of evidence is opposed to the inheritance of acquired habits.

The paper was further discussed by Drs. Jos. T. Smith, John Morris, L. McL. Tiffany, J. C. Harris, J. C. Thomas, L. E. Neale, R. T. Wilson, G. H. Rohé and R. H. Goldsmith.

Dr. H. M. Thomas then read a paper on "Syphilis as a Cause of Nervous Disease."

Dr. B. D. Evans read a paper entitled "A Case of Periodical Insanity, with the Menstrual Function the Exciting Cause of Outbreaks."

This was discussed by Drs. R. Gundry J. C. Harris, P. C. Williams, H. B. Jacobs, G. H. Rohé and L. McL. Tiffany.

Dr. William H. Welch then delivered a few remarks on

THE DIAGNOSIS OF ASIATIC CHOLERA.

The diagnosis of Asiatic cholera is of great interest and the undertaking is one of much importance. The importance of the diagnosis varies at the time of the epidemic. It is important to make the diagnosis of the first case or of the first few cases. The recognition of this is essential for preventing the epidemic. Then even after the epidemic has broken out it is desirable to make the diagnosis early, because the treatment should begin as early as possible, because it is then more effective. Nevertheless it is not a bad mistake if cases of diarrhœa are called Asiatic cholera, for other diseases are often called cholera.

The means at our disposal independent of the existence of an epidemic are the symptoms and post-mortem appearances. The diagnosis after death is an important pathological aid of the disease. Experience during the last epidemic of cholera at Hamburg and elsewhere is conclusive that there is no diagnostic symptom or pathological lesion of cholera; there is only one thing, and that is the determination of the organism, the comma bacillus of Koch, in the discharges. When we consider the different classes of cholera it is almost impossible to classify them. We have on record pathological studies of hundreds of cases, and we find that in eight to ten in every 100 the cholera bacillus has been found in the stools of healthy persons who have had to do with those sick, those with no symptoms of the disease and with no diarrhœa, but who are with the sick and in the hospitals. So far it has only been found in healthy persons who are near the sick. Then there are those cases of the Asiatic sort with diarrhœa and in no way differing from ordinary diarrhœa, but it is simply cholera without vomiting, in which the cholera bacilli are present in the stools. These are not diagnostic without the bacilli. Then there are those cases of cholerine, that is cases that present more or less the symptoms of cholera, but do not pass into the asphyctic or algid condition of the disease with diarrhœa, rice water discharge, vomiting, cramps, complete suppression of urine, absence of the radial pulse and aphonia. This is cholerine. Of these cases there should be a very strong suspicion. The term rice water stools is applicable only to a minority of the cases. According to the reports from Hamburg we must not expect to have typical rice water stools; they are more often absent than present. They have a color, and frequently contain some bile and are green or yellow. In the asphyctic stage the disease is more characteristic; there is complete

suppression of urine and the urine secreted in the algic stage is called the last urine, and no more can be obtained with a catheter, and there is no more urine until the stage passes away.

The prognosis depends upon this stage. If it lasts seventy-two hours it is said to be hopeless. The character of the first urine passed after this stage is awaited with great interest. It always contains albumen and casts, and the prognosis is always more favorable the larger the number of casts, for they must be washed out. The absence of the radial pulse is another symptom of importance. There is no correspondence between the strength of the heart beat and the absence of the pulse, indicating that this absence of the radial pulse is in part caused by the spasmodic contraction of the blood vessel. The heart is often quite strong.

There is loss of voice or hoarseness; extreme coldness of the extremities with the internal temperature normal or a little above. There is often 6° to 8° difference between the temperature in the axilla and that in the vagina or rectum. There is sinking in of the face, and the eyes take on that peculiar color which is described in the old books. Exactly these same symptoms may occur in cholera nostras, but an absolute diagnosis can not be made from these alone. The disease may go into a typhoid state and end there. The fulminating variety is where the symptoms come on with great rapidity. The impressions from the cases at Hamburg are that death was due to intoxication and not so much from a draining away of the body fluids.

There is nothing in these symptoms taken by themselves or together to constitute a diagnostic landmark, nor in the post-mortem appearances that are decisive. All the usual post-mortem appearances are found in these cases, and the results are not pathognomonic. We can not make a diagnosis of Asiatic cholera from the post-mortem appearances. Koch's comma bacillus is the only true diagnostic point, just as the tubercle bacillus is in tuberculosis. It is a difficult work—more so than the recognition of the tubercle bacillus, and it is doubtful if the general practitioner, even if he should have the knowledge, would have the time to go through the methods necessary to make the diagnosis. We first make cover slip preparations from the rice water stools, taking up the large rice lumps, and if they contain a large number we may be sure, but if only few are present it is not safe to make a diagnosis in this way. There are probably one or two in every city capable of making a diagnosis from the stools, and who are able to study the organism when suspected. More frequently cultures are made, and that requires twenty-four to forty-eight hours to make the diagnosis, but sometimes it can be made immediately, and then it is positive. The cases where these methods have failed are very, very few, and those of failure are regarded as curiosities. He should be prepared to make examinations for any physician at the Johns Hopkins Pathological Laboratory, and if any one should have a suspicious case they may send a specimen of the stools in a wide-mouthed bottle tightly sealed with paraffin or sealing wax, and this may be sent by mail with safety and will last a long time

The first case at Hamburg occurred on August 14, 1892, died on the 15th, and through some delay the examinations were not made in time and the disease was not officially declared to be present until the 22d, and by this unfortunate circumstance eighty cases had broken out when the disease was officially announced. This by no means illustrates what can be done.

These remarks were discussed, with personal reminiscences of the disease, by Drs. P. C. Williams, J. C. Hemmeter, E. M. Schaeffer and D. W. Cathell.

Dr. Herbert Harlan then read a paper on "Suppurative Inflammation of the Temporal Bone," which was discussed by Drs. Harry Friedenwald and J. R. Winslow.

Dr. H. Friedenwald then read a paper entitled "The Causation of Inflammation, a Review," which was discussed by Dr. Aaron Friedenwald.

Dr. John R. Winslow read a paper on "Tuberculosis of the Pharynx," which was discussed by Dr. Wm. B. Canfield.

Dr. Frank M. Chisolm read a paper on "Acute Glaucoma following the Extraction of Cataract."

Dr. Robert L. Randolph read a paper on "A Clinical Study of Thirty-five Cases of Epidemic Cerebro-spinal Meningitis, with especial Reference to the Eye Symptoms," which was discussed by Drs. E. J. Bernstein and A. Freidenwald.

Dr. E. J. Bernstein read a paper on "Hypertrophic Rhinitis as an Etiological Factor in Asthenopia."

Dr. Wm. T. Cathell read "A Study of Two Cases of Paroxysmal Sneezing, with Treatment."

Dr. George H. Rohé was elected president for 1893–4.

Thirty-four new members were elected. Adjourned.

WEIL'S DISEASE.—Fiedler (*Deutsches Archiv für klinische Medicin*, Vol. L. 1892), basing his opinion upon thirty-one cases of the above disease observed by himself, and upon a study of the literature of the subject, comes to the following conclusions:

1. Weil's disease is an acute infectious disease.

2. It is probably (etiologically, symptomatically, and anatomically), identical with the bilious typhoid fever first described by Griesinger in 1852, and later by Kartulis and Diamantopulos, disease which has no relation to relapsing fever.

3. It does not behave as a mere collection of symptoms, but as a well-characterized, specific disease. It is sharply differentiated from typhoid fever, septicemia and catarrhal jaundice. It is a disease *sui generis*.

4. The disease-producing agent, chemical substance or microörganism, is yet unknown. It is to be searched for in putrifying organic substances (Laveran's organism).

5. The disease affects especially males of middle adult life. It is very rare in females and children. It is most frequent in the hot months.

6. It begins quickly, without prodromes, mostly with chill and high fever, headache, congestion of the brain, severe general and gastric symptoms, with much thirst. Very quickly, mostly on the second day, severe muscular pains begin, most common in the calf, which last a long time, often for weeks.

7. On the third to the seventh day jaundice appears, with swelling and tenderness of the liver.

8. The fever has a typical course, lasting usually eight to twelve days, and ending by lysis. In about two-thirds of the cases a second rise of temperature occurs five to eight days after the fever first disappeared. This attack is usually less severe than the first.

9. The pulse in the beginning is frequent; in the height of the jaundice sub-normal, seldom intermittent, frequently dicrotic.

10. Nephritis (albuminuria) is almost constantly observed; the amount of urine in the beginning is decreased, and contains bile coloring matter for a long while.

11. The spleen is usually increased in size, especially in the beginning of the disease, and the splenic tumor can sometimes be palpated.

12. Herpes and erythema usually appear.

13. Epitaxis is very frequently observed, and sometimes hemorrhages from other mucous membranes. In severe cases there may be subcutaneous and sub-mucous hemorrhages.

14. Catarrh of the air passages is seldom observed. Pneumonia and pleurisy occurred but once in his series.

15. The disease usually terminates in recovery in the German districts. The convalescence is protracted.—*University Medical Magazine.*

THE
Journal of the American Medical Association
PUBLISHED WEEKLY.

SUBSCRIPTION PRICE, INCLUDING POSTAGE:
PER ANNUM, IN ADVANCE $5.00
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SATURDAY, MAY 13, 1893.

CONCERNING HEREDITY AND TUBERCULOSIS.

PROF. GARTNER of Jena, has recently published an interesting as well as extensive study into the question of the heredity of tuberculosis (*Zeitschrift für Hygiene und Infectionskrankheiten*, B. 11, 1893). This study is based upon clinical observations and upon statistical and experimental investigations, and his conclusions certainly throw some new light upon the various obscure problems concerned in the etiology of tuberculosis.

From the study of a vast amount of statistical material the following deductions were warranted: 1. The death rate from tuberculosis is greatest during the first years of life, after which it falls to rise again at the time of puberty. 2. The curve of the mortality rate of tuberculosis corresponds quite accurately to that of the general death rate as shown by the Prussian statistics. 3. The tuberculosis death rate tallies with that of the diseases of the organs of the body, and is quite unlike the death rate of the acute infectious diseases, with the exception of the pulmonary and the pleural inflammations. From these general deductions it can still further be concluded: *a*. The mortality of tuberculosis depends to a certain degree on age predisposition; this disease puts children and old people to death easier than the youth and the young adult; variations in the general resistance must be regarded as present to explain these phenomena. *b*. The alarming death rate of the first year of life, which is not reached by any other period, indicates that in addition to the general liability to the disease on account of the age itself there must exist at this early time a source of infection of great intensity. *c*. From statistics it was impossible to learn whether the source of this infection was extra- or intra-uterine; great possibility for post-partum infection to occur must be granted on account of the intimate relations between the newborn and the mother, as well as other members of the family. Whatever the source of infection during this early time may be, there is certainly abundant ground to believe that tuberculosis later on in life may depend on early infection.

The infrequency of congenital tuberculosis has been held by some to depend upon the fact that the bacillus, transferred from parents to child, is held in abeyance for a time by the growing cells, to become actively pathogenic when the nutritive and vital energies of the cellular elements are somewhat exhausted; but GARTNER does not believe that capacity to proliferate and to grow necessarily implies great power of resistance, while on the other hand, a granted, low vital resistance of the young cells does not necessarily mean that hereditary tuberculosis must be present at birth, for the following reasons: Germinative infection probably does not occur; the bacilli nearly invariably gain entrance through the placenta, and the liability to infection depends to some extent upon the amount of blood in its sinuses; consequently the principal danger must come in the last third of pregnancy, and the passage of bacilli from mother to child is certainly favored at the time of birth—hence the lesions of the disease may not be visible and recognizable at the time of birth, and yet the germs may be present in the body of the newborn and cause active lesions at some future time. Although the frequency of pulmonary tuberculosis must be regarded as speaking against fœtal infection, because in the fœtus the blood avoids the lungs, yet the structure and the position of the lungs must favor bacillary localization, and GARTNER consequently thinks that a certain proportion of the cases of early primary lung tuberculosis might depend on a congenital infection. The primary liver, spleen, bone and joint tuberculosis must almost perforce be considered as of fœtal origin, because it is difficult to understand how the bacilli can pass the lymphatic filter behind the digestive and the respiratory organs without a trace of lymphatic gland tuberculosis and then locate and develop in the much less predisposed osseous and articular structures. Fœtal tuberculosis can consequently not be positively excluded, and a certain number of the primary tuberculoses in the bones, the joints and the solid organs must be looked upon as inherited.

The above embodies the conclusions to which GARTNER came from a general study of the statistics and of the pathology of tuberculosis. He then studied the problem experimentally in the following manner: Tubercle bacilli were injected in the abdominal cavity of female animals in order to infect the ovum or to cause a placental infection, and he succeeded in showing that in abdominal tuberculosis bacilli may find entrance into the fœtus. Injection of bacilli into the circulation of pregnant animals produced tuberculosis in 10 per cent. of the embryos. It was

also found that in mice with pulmonary tuberculosis with or without secondary generalization, fœtal infection often occurred; this was also the case in birds.

In male animals tubercle bacilli were injected into the lungs, and bacilli were subsequently found in the semen five times in thirty-two examinations. Considering the large number of spermatozoa—millions in one ejaculation—and the relatively much smaller number of bacilli, the chances for coincident fructification and infection must after all be extremely slight, almost at a minimum. In a series of experiments it was found that in spite of abundant bacilli in the sperm of animals with testis tuberculosis, no fœtal infection occurred; on the other hand, bacillary semen may undoubtedly cause genital tuberculosis in the female; of sixty-five female guinea pigs cohabiting with males whose testicles were rendered tuberculous, five died from tuberculosis, the disease starting from the vagina.

The results of GARTNER'S extensive and thorough investigations may be summarized as follows: In mice, canary birds and rabbits it was shown experimentally that tubercle bacilli quite often pass from mother to fœtus. Statistics show that in man the first years of life present the highest death rate from tuberculosis, and the disease pursuing a relatively chronic course, the infection taking place most likely in the last part of the embryonal period, can not consequently be expected to present characteristic lesions at birth—therefore it appears that in man as well as in animals bacilli often pass from mother to offspring. Experiments on rabbits and guinea pigs failed to demonstrate direct transmission of bacilli from father to embryo, but quite often infection of the mother. With reference to man it may be said that the numerical relation between the spermatozoa and the bacilli, taken in conjunction with the great infrequency of primary female genital tuberculosis, would indicate that tuberculosis is not transmitted directly from the father to the embryo.

GARTNER'S experimental evidence taken in conjunction with his statistical conclusions, certainly seem to show that the much disputed influence of heredity in the causation of tuberculosis may after all depend upon something much more tangible than the alleged transmission of the vague predisposition, namely the transmission from mother to fœtus of the essential cause of the disease. His study and research adds much to our knowledge concerning the direct transmission of pathogenic microbes from mother to fœtus and with especial reference to tuberculosis, a disease in the causation of which heredity has always been thought to play an important part.

MEDICAL TEMPERANCE ASSOCIATION.

This society, organized at the Washington meeting of the American Medical Association, has manifested a vigor and strength that promises to have a very large influence in the future. Founded on the same essential platform as the English Society which has been in existence seventeen years, it aims to rouse up and foster scientific study of the alcoholic question.

The English society numbers several hundred members, who yearly contribute many papers and studies of statistics concerning alcohol and its value as a medicine, and other branches of the same topic. DR. B. W. RICHARDSON is president, and a monthly journal is issued as an organ of this society, the members of which now include some of the most distinguished medical men of Great Britain. Several branches are in active operation holding meetings monthly and quarterly, and sending delegates to the annual meeting, which convenes at the same time and place as the British Medical Association. The American society is presided over by DR. N. S. DAVIS, and has already over a hundred members. The annual meeting will be at Milwaukee, June 8, (as the members all belong to the American Medical Association) and will no doubt, attract much attention. In this country, where temperance and the alcoholic question occupies so large a part of sociological and political topics of the hour, it seems eminently proper for physicians to study and teach the public on this matter. Of all others, medical men are the most competent and have the best facilities for sound counsel in this field. Yet, to-day, almost the entire literature, together with the leaders and teachers of the uses and abuses from alcohol, are a confused medley of statements by the most incompetent persons. It seems startling that the alcoholic question should receive so little attention from physicians, when it is literally a scientific subject which can only be known and understood by the methods of science. This society has begun on this basis. Two prizes of a hundred dollars each are to be awarded to the best essays, "On Alcohol as a Medicine," also on "The Physiological Action of Alcohol on the Body," at the coming meeting. A committee on statistics of the mortality from alcohol, will report on the year's work. Several papers will be read on medical phases of this subject at the coming meeting. This society ignores all political or moral discussions of temperance, and seeks to study the subject from the scientific side. Every medical man in the country should be interested in this work, for notwithstanding all that has been written, the subject is practically unknown; and will be until it is studied generally by physicians.

We take pleasure in calling attention to this society and its work, and believe that as long as they

confine their studies exclusively to the scientific side of the alcoholic question, they will fill a very important place in the progress of medicine. The English Society on the same basis, has been very influential in pointing out facts and conclusions concerning alcohol and its influence not known before; and we have no doubt this society will be equally influential and attain high rank in the years to come. All persons who are interested should write the secretary, DR. CROTHERS, of Hartford, Conn., for transactions of last meeting and programs of the coming session.

THE INTERNATIONAL MEDICAL CONGRESS.

A telegram in the daily press of May 7 says the International Medical Congress to be held in Rome, September 24, has been postponed on account of the cholera. We sincerely hope this is a canard, and that there is no necessity for such action, but if it has been taken, we can say to our European confrères that they may find it to their professional and personal interest to visit the American Medical Association, which will meet in Milwaukee, June 6–10, and at the same time view the wonders in the World's Fair; or, if more convenient, visit the Pan-American Medical Congress in Washington, September 5–8, which will be one of the most notable events in the medical history of America. The World's Fair will still be open to visitors.

While we regret exceedingly that there should be any occasion for the postponement of the Congress at Rome, and that such a contingency has arisen, we extend to the physicians and surgeons of Europe an invitation to visit our American shores, assuring them of a cordial welcome and a hearty reception. This year America is the world's host.

THE CONFERENCE OF STATE EXAMINING AND LICENSING BOARDS.

The third annual meeting of the Conference of State Medical Examining and Licensing Boards, heretofore announced in this journal, will be held at the Pfister Hotel, Milwaukee, June 7, 1893.

There is no one organization in the country that can effect as much for the advancement of the profession as this.

The number of these official bodies is increasing each year in keeping with the general progress of the profession. The mere fact of their existence is an additional stimulus and incentive to higher requirements on the part of the teaching bodies. It is in the highest degree desirable that this meeting should be attended by all of the members of the various licensing boards in the United States and Canada. And especially is it important that recently created boards should avail themselves of this opportunity to profit by the experience of those who have had long training in the difficult work of conducting examinations. It is expected that representatives of the Army, Navy and Marine Hospital Boards will be in attendance and lay before the conference the systems which they pursue and the principles by which they are guided in formulating and conducting their examinations. This feature of the meeting alone will constitute an object lesson of incalculable value.

Any members of the profession, however, who are interested in elevating the tone and raising the standard of medical education will be welcomed, we have no doubt. It is only by such mutual interchange of thought and experience that concert of action can be secured which is so eminently desirable to harmonize the procedures of the different boards, and so far as practicable, indeed, the laws of the different States on the subject. One important feature of the conference will be a report from each board of its work during the past year. Among the subjects on which papers will be read as already noted in THE JOURNAL, are the influence of examining boards in elevating the moral and intellectual tone of the profession, their composition and mode of appointment, their reciprocal relations, methods of conducting examinations and others of equal practical value.

PRELIMINARY PROGRAMS.

These forerunners of the ensuing meeting of the American Medical Association, indicate a degree of activity and interest in the scientific work of that body that has never been equaled. More than four hundred titles of papers are already in the hands of the Section officers. The arrangement and discussion of this immense mass of material will call for an exercise of first class ability on the part of the presiding officers.

In view of the immensity of the work in the hands of each of the Sections, it seems to be very desirable that the hours of the Section meetings after the first day shall begin at 9 A. M., and 1:30 P. M. The general sessions being held at 4:30 P. M., after the first day, as provided in the new Constitution.

Unless this or a similar arrangement is made, it will be impossible to do justice to those who have spent hours, days and weeks in preparing for this occasion.

Papers read by title only will not be published as a part of the transactions of the meeting, but abstracts giving a full synopsis may be read and discussed, after which the full paper may be published as part of the annual transactions.

All papers read in the Sections belong to the Association exclusively for publication in the journal of the Association. Their prior appearance elsewhere is regarded as bad ethics and a sufficient

cause for the exclusion of all such papers from THE JOURNAL as part of the annual transactions of the Association.

It is not the intention or purpose of the Association to in any way exclude or prevent reporters of other publications from making as full and complete notes of all the proceedings of the Association as they may desire, but we suggest to authors and journalists that they bear in mind the above statement.

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The hall for the general sessions and halls for the Section meetings are conveniently located, near to each other and on quiet streets. In preparing for the meeting, which will be very large, perhaps much the largest in the history of the Association, the Committee has made ample provision for the entertainment of all who may pull their latch strings or press their buttons.

RAILROAD RATES.—In purchasing tickets to Milwaukee, obtain a certificate from the ticket agent, in order that you may have the benefit of reduced price for return. The round trip is a rate and a third.

THE Illinois State Board of Health has been reorganized and the following members appointed by the Governor: George Thilo of Cook county, to succeed F. W. Reilly, term expired; William Quine of Cook county, to succeed Daniel H. Williams, removed; Sarah Hackett Stevenson of Cook county, to succeed William R. McKenzie, resigned; James B. Fatrick of Cook county, to succeed William A. Haskell, resigned; Julius Kohl of St. Clair county, to succeed A. L. Clark, resigned.

IOWA MEDICAL BOARD UPHELD.—*State Supreme Court Passes on the Mooted Question of Its Authority.*—Des Moines, Ia., May 9.—[Special.]—The Supreme Court this morning handed down its decision in the long-contested case of the Iowa Eclectic Medical College against the Iowa State Board of Medical Examiners. It was an action in mandamus to compel the board to recognize the college and grant certificates to graduates thereof, the board having refused on the ground that the college did not come up to the requirements and standard fixed by the board in its teaching and appliances. The action was based on the claim that the law giving the board such power is unconstitutional, because there is no appeal from its decisions. The court decides that the law is constitutional, and voted that the board has the power to fix the standard of medical colleges, and there is nothing in the statute requiring that any particular school of medicine shall be represented on the board. Judge Given wrote the opinion. This is in accord with the decision of the Supreme Court of Oregon on this question.

ASSOCIATION NEWS.

PBELIMINARY PROGRAM OF THE SECTION ON DISEASES OF CHIDDREN.

OFFICERS—C. G. Jennings, Chairman, Detroit, Mich.; F. S. Parsons, Secretary, Northampton, Mass.

EXECUTIVE COMMITTEE—Wm. Perry Watson, Jersey City; W. S. Christopher, Chicago; E. F. Brush, Mt. Vernon, N. Y.

The officers of the Section take pleasure in announcing that the services of an expert stenographer have been engaged, and that especial attention will be given to the publication of full and accurate reports of all discussions.

TUESDAY, JUNE 6—AFTERNOON SESSION.

1. Address of the Chairman—Some Recent Advances in Pediatrics, by C. G. Jennings, Detroit, Mich.
2. Observations on Isolated Cases of Diphtheria, by W. A. Dixon, Ripley, Ohio.
3. Some Observations in Treating Cases of Diphtheria, by G. Benson Dunmire, Philadelphia, Pa.
4. Presentation of Aseptic Intubation Instruments, with Statistics of Intubation, by F. E. Waxham, Chicago, Ill.
5. The Therapeutics of Diphtheria, by F. E. Waxham, Chicago, Ill.
6. Observations Relating to Diphtheria, by J. Lewis Smith, New York City, N. Y.

Discussion of Diphtheria opened by C. W. Earle, Chicago, Ill.; V. C. Vaughan, Ann Arbor, Mich.; Joseph Eichberg, Cincinnati, Ohio; J. A. Larrabee, Louisville, Ky.; E. Fletcher Ingals, Chicago, Ill.; Wm. P. Munn, Denver, Col.

WEDNESDAY, JUNE 7—MORNING SESSION.

7. The Pathogenesis of Bronchitis, by W. S. Christopher, Chicago, Ill.
8. The Pathology and Symptomatology of Acute Bronchitis and Broncho-Pneumonia, by C. L. Dodge, Kingston, N. Y.
9. Some Phases of Broncho-Pneumonia in Children, by J. M. G. Carter, Waukegan, Ill.
10. The Pathology and Symptomatology of Croupous Pneumonia, by F. S. Churchill, Chicago, Ill.
11. The Therapeutics of Bronchitis, by I. N. Love, St. Louis, Mo.
12. The Therapeutics of Broncho-Pneumonia, by F. S. Parsons, Northampton, Mass.
13. The Therapeutics of Croupous Pneumonia, by J. A. Larrabee, Louisville, Ky.

Discussion opened by F. Forchheimer, Cincinnati, Ohio; Heneage Gibbes, Ann Arbor, Mich.; B. A. Waddington, Salem, N. J.; Edward W. Wells, Chicago, Ill.; Jas. B. Herrick, Chicago, Ill.; Marion Thrasher, San Francisco, Cal.; Wm. Perry Watson, Jersey City, N. J.

WEDNESDAY, JUNE 7—AFTERNOON SESSION.

14. Some of the Sequelæ of Pertussis, by B. A. Waddington, Salem, N. J.
15. The Treatment of Chorea by Large Doses of Quinine, by W. A. N. Dorland, Philadelphia, Pa.
16. Insane Disorders of Children; their Extra-Asylum Treatment, by J. Madison Taylor, Philadelphia, Pa.

Discussion opened by C. B. Burr, Pontiac, Mich.; F. W. Mann, Detroit, Mich.

17. Acute Endocarditis of Children; Etiology, Symptomatology and Treatment, by C. N. Highley, Conshohocken, Pa.
18. Chronic Endocarditis in Children; Pathology, Valvular Lesions, Symptomatology and Treatment, by M. P. Hatfield, Chicago, Ill.
19. Pericarditis in Children; Etiology, Pathology, Symptoms and Treatment, by Wm. Perry Watson, Jersey City, N. J.

Discussion opened by I. N. Love, St. Louis, Mo.; J. M. Keating, Colorado Springs, Col.; J. Lewis Smith, New York City, N. Y.; B. A. Waddington, Salem, N. J.; and J. A. Larrabee, Louisville, Ky.

THURSDAY, JUNE 8—MORNING SESSION.

20. Phenomena and Causes of Gastro-Enteric Fever (not Typhoid), by J. Wellington Byers, Charlotte, N. C.
21. The Importance of Early Effective Elimination in the Zymotic Diseases of Children, by J. A. Work, Elkhart, Ind.

Discussion opened by V. C. Vaughan, Ann Arbor, Mich.

22. Dentition and Some of its Diseases, by Marion Thrasher, San Francisco, Cal.
23. Artificial Feeding of Infants, by Geo. C. Mosher, Kansas City, Mo.
24. Cholera Infantum, its Treatment in Malarial Localities, by L. Scheneck, Mt. Carmel, Ill.
25. Milk Infection, by V. C. Vaughan, Ann Arbor, Mich.

Discussion opened by W. S. Christopher, Chicago, Ill.; E.

F. Brush, Mt. Vernon, N. Y.; M. P. Hatfield, Chicago, Ill.; W. A. Dixon, Ripley, Ohio.

THURSDAY, JUNE 8—AFTERNOON SESSION.

26. A Case of Laryngeal Stenosis Complicating Scarlatina, with Remarks on Treatment, by J. A. Wessinger, Ann Arbor, Mich.

27. Primary Syphilis and Gonorrhœa in Children, by B. M. Ricketts, Cincinnati, Ohio.

28. Atresia Oris, by Edward Borck, St. Louis, Mo.

29. Etiology, Morbid Anatomy and Treatment of Infantile Hernia in the Male, by Thomas H. Manley, New York City, N. Y.

30. Hernia in Children, by W. E. Wirt, Cleveland, Ohio.

Discussion of Hernia to be opened by C. B. Nancrede, Ann Arbor, Mich.; De Forest Willard, Philadelphia, Pa.; F. W. Robbins, Detroit, Mich.

PRELIMINARY PROGRAM OF SECTION ON ANATOMY AND SURGERY.

Nephrectomy, by J. H. Carsten, Detroit, Mich.

Shall it be Nephrectomy or Nephrotomy? by Joseph Price, Philadelphia, Pa.

Gastroliths, by W. B. Outten, St. Louis, Mo.

H. O. Walker, Detroit, Mich. Title not given.

Appendicitis, by Joseph Hoffman, Philadelphia, Pa. Discussion opened by E. E. Montgomery, Philadelphia, Pa.

A Plea for Early Operative Interference in Appendicitis, by W. Easterly Ashton, Philadelphia, Pa.

Joseph Pancost, Philadelphia, Pa. Title not given.

Unnecessary Restrictions in Surgery, by John B. Roberts, Philadelphia, Pa.

Amputations below the Knee and Artificial Limbs for Same, by Mordecai Price, Philadelphia, Pa.

A New Operation for Varicose Veins. (Second day.) By Ernest LaPlace, Philadelphia, Pa.

Diagnosis and Treatment of Chronic Intestinal Obstruction. (First day if possible.) By John Deaver, Philadelphia, Pa.

Treatment of Compound Fractures, Paul Vesterling, St. Louis, Mo.

Present Status of Thoracic Surgery, by McFadden Gaston, Atlanta, Ga. Discussion opened by E. L. Shurley.

Artificial Opening of Pulmonary Cavities—Insertion of Rubber Tube and Injection of Chlorine Gas, by E. L. Shurley, Detroit, Mich.

Suprapubic Cystotomy in Two Stages—its Indications and Technique, by N. Senn, Chicago, Ill.

Operation for Stricture of Ureter in Hydro or Pyonephrosis, by Christian Fuger, Chicago, Ill.

Surgery of the Ureters, by Weller Van Hook, Chicago, Ill.

Ureterectomy, by Howard A. Kelly, Baltimore, Md.

W. H. Wattem, Louisville, Ky. Title not given.

The New Treatment of Hernia, by Alexander Dallas, New York.

C. A. L. Reed, Cincinnati, Ohio. Title not given.

Dessasure Ford, Augusta, Me. Title not given.

Ample Incision, by Geo. Ben Johnson, Richmond, Va.

W. C. Dugan, Louisville, Ky. Title not given.

H. O. Marcy, Boston, Mass. Title not given.

A Rational Treatment of Prostatic Obstruction in old Men, by Geo. W. Broome, St. Louis, Mo.

A New Applicator for Introducing Medicaments into Urethra, Uterus and Rectum, by A. B. Kirkpatrick, Philadelphia, Pa.

Intestinal Anastomosis by Mechanical Means and Without Suture with Demonstration. (Third paper in forenoon of second day if possible.) By J. B. Murphy, Chicago, Ill.

Intestinal Anastomosis by an Improved Method without Plates and with but two knots, either of Silk or Catgut can be used. (With exhibition of specimens.) By M. E. Connell, Wauwatosa, Wis. Discussed by J. B. Murphy.

Specimens demonstrating the Operation of Gastro-Cholotomy, end to end Anastomosis of Gut and the connecting of the Gall Bladder with the Alimentary Tract, as Performed with the Murphy Button and by the Mansell Operation, by Merrill Ricketts, Cincinnati, Ohio.

Pathogenic Bacteria. (Illustrated.) By Sternberg.

Remarks on Stricture of Urethra of Large Caliber with Illustration Cases, by Frank Lydston, Chicago, Ill.

Strictures of the Rectum, by Joseph B. Bacon. Discussion opened by J. B. Murphy and Jas. M. Matthews.

Chronic Prostatic Suppuration, by W. T. Belfield, Chicago, Ill. Discussion opened by Hunter McGuire.

A Few Notes on Tibio-Tarsal, Tarsal, Medio-Tarsal, Tarso-Metatarsal, Phalangeal, Traumatic and Artificial Amputations in the Lower Extremities, Substitutes for Parts lost in this Situation, by Thomas H. Manley, New York.

A Case of Chronic Glanders, with Recovery, by Bayard Holmes, Chicago, Ill.

A Case of Aneurism of Common Femoral Artery; Ligature of External Iliac, Remarks, by Donald MacLean, Detroit, Mich.

Hydatids of Kidneys, with report of a Case, by John B. Hamilton, Chicago, Ill.

Two Cases of Traumatic Rupture of the Small Intestine, Early Operation and Recovery, by H. C. Dalton, St. Louis, Mo.

Report of Cases in Evidence of Surgical Impunity of Peritoneal Viscera, by John E. Link, Terre Haute, Ind.

Is Removal of Sigmoid Flexure Warranted in Malignant Disease of Same? by Jas. M. Matthews, Louisville, Ky.

Brain Surgery, by F. C. Schafer, Chicago, Ill.

A Study of Some Cases of Intracranial Surgery, by E. Lanphear, Kansas City, Mo.

PROGRAM OF THE SECTION OF LARYNGOLOGY AND OTOLOGY.

TUESDAY—AFTERNOON SESSION.

1. President's Address, by E. L. Shurly, Detroit, Mich.

2. Rhinitis Atrophica Fœtida (Ozena Germina), by O. M. Waterman, Milwaukee, Wis.

3. Treatment and Study of Nasal Catarrh, by D. S. Campbell, Detroit, Mich.

Discussion opened by A. B. Thrasher.

4. Lupus of the Nose, by John O. Roe, Rochester.

Discussion opened by Holbrook Curtis.

5. On Cases of Empyema of the Ethmoid Cells and Sphenoid Sinuses, causing displacement of the Eyeball; their Operation from the Orbit, by Herman Knapp, New York.

Discussion opened by C. H. Burnett, Philadelphia, Pa.

6. Nasal Stenosis treated by Operative Measures on the Cartilages of the Alæ, by A. B. Farnham, Milwaukee, Wis.

7. Operations on the Nasal Septum, by Holbrook Curtis.

Discussion opened by Fletcher Ingals.

Business.

WEDNESDAY—MORNING SESSION.

8. A New Treatment of Chronic Suppurative Otitis Media, by H. C. Heath, Indianapolis, Ind.

Discussion opened by C. W. Richardson.

9. A Case of Carious Destruction of the entire Pyramid of the Temporal Bone, by C. Barck, St. Louis, Mo.

10. Twenty additional Cases of Mastoid Trephining, by Alexander Randall, Philadelphia, Pa.

11. The Radical Operation according to Schwartze, of Caries involving the Middle Ear, with Report of Cases, by C. R. Holmes, Cincinnati, O.

Discussion opened by Herman Knapp.

12. The Treatment of Tinnitus in Aural Sclerosis, by Ralph W. Seiss, Philadelphia, Pa.

Discussion opened by Samuel Sexton.

WEDNESDAY—AFTERNOON SESSION.

13. The Class of Cases in which Excision of the Membrana Tympani and Excision of the Ossicles may be expected to give good Results. by Geo. Wilkinson, Omaha, Neb.

14. The Cases in which we may expect good Results from Excision of Drum and Ossicles, by S. McCuen Smith, Philadelphia, Pa.

15. Partial Myringectomy and Removal of the Incus and Stapes for the Relief of the Lesions caused by Chronic Catarrh of the Middle Ear, by C. H. Burnett, Philadelphia, Pa.

Discussion opened by Lucien Howe.

16. Chronic Naso-Pharyngeal Inflammations an Etiological Factor in the Disorders of Digestion and Excretion, by P. C. Jensen, Manistee, Mich.

17. Asthma due to Intra-Nasal Disease, by F. S. Crossfield, Hartford, Conn.

Discussion opened by Price Brown.

THURSDAY—MORNING SESSION.

18. Adenoid Vegetations of the Pharyngeal Vault—Methods of Operating, by A. B. Thrasher, Cincinnati, O.

19. When should we Operate on the Pharyngeal, Faucial and Lingual Tonsils, by S. G. Dabney, Louisville, Ky.

20. Some Remarks on the Operative Methods in the Treat-

ment of Adenoid Growths, by C. W. Richardson, Washington, D. C.

Discussion opened by W. E. Casselberry.

21. Indirect Treatment of Laryngeal Disease, by Ephraim Cutter.

Discussion opened by S. G. Dabney, Louisville, Ky.

22. Case in which an Orange Seed Sprouted in the Larynx, by Geo. F. Keifer, Lafayette, Ind.

23. Three Cases of Laryngeal Neoplasms, by Robert Levy, Denver, Col.

24. Laryngeal Tumors; their Removal and Treatment, by Chas. S. Allen, New York City.

Discussion opened by John O. Roe.

THURSDAY—AFTERNOON SESSION.

25. Physiology and Pathology of the Eustachian Tube, by John North, Toledo.

26. Iodine Applied in Hypertrophy of the Walls of the Eustachian Orifices, by A. J. Erwin, Mansfield.

Discussion opened by Dr. Reese, Toronto.

27. Intubation and Tracheotomy in Diphtheritic Croup, with Report of Cases, by W. Johnson, Paterson, N. J.

Discussion opened by Bryson Delavan.

28. Clinical Experience with Pyrozone, by J. E. Newcomb, New York City.

29. Notes of Two Years' Work in the Nose and Throat Clinic at the Michael Reese Hospital, Chicago, by Norval H. Pierce, Chicago.

30. Two Unusual Cases of Syphilis of the Upper Air Passages, C. H. Knight, New York City.

31. *a.* Description and Presentation of New Combination Ear Instruments. *b.* Description and Presentation of New Nasal Instruments, by Adolph Blitz, Indianapolis, Ind.

General Discussion.

Papers are conditionally promised by Drs. W. H. Daly, Don M. Campbell, D. B. Delavan, Lucien Howe and S. G. Miner.

DOMESTIC CORRESPONDENCE.

Why We Do Not All Think the Code Above Revision.

To the Editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

Dear Sir:—First. The present Code contains irrelevant matter; it may be excellent matter of its kind, admirable in its place, but its proper place is outside of the organic laws which govern a medical association. And, whether its status be that of by-laws or standing resolutions, the Code of Ethics is a portion of the organic law of our medical associations.

Specimens of the matter referred to are to be found in the account of the obligations of patients to their physicians or the attitude of mind that the physician should observe towards his profession. That the sentiments expressed are excellent; that the phraseology used is beautiful no more entitles such passages to a place in our organic law than the same qualities would render pertinent a beautiful and inspiring essay on the subject of ethics.

Second. Whether because of such irrelevant matter, or for other reasons, the Code as it stands, is not enforced; and the experience of nearly half a century goes uniformly to demonstrate that it can not be enforced. The writer has never known a case in which the penalties supposed to follow its violation were inflicted, although probably most members of the American Medical Association believe they know of instances of its violation. For instance, there is an article about collusion between the physician and apothecary. A few years since, some fellow members of our local society called my attention to what they claimed to be a gross violation of this provision, and of which they claimed to have conclusive knowledge. I offered for the vindication of the Code to appear as a prosecutor in the case against a gentleman with whom my relations had always been pleasant, if those who claimed to know of the violation would appear before the censors of the society, and before the society itself to testify to what they knew, but the necessary testimony was never forthcoming.

Now, it is unlikely that in all the years that the Code has been a portion of our organic law, in all the myriad instances of its violation that have occurred there have been none of conviction and punishment, only that the proportion of these is so small as to be of insignificant importance and influence among the many cases of such alleged violation. The reasoning often resorted to that a law may do good though not always enforced, does not apply to this case. This is a case of a law never or almost never enforced. The claim made that the simple presence of the law on the statute book, quite apart from the matter of its enforcement, exerts a salutary influence, is, I think quite fallacious.

Some years since, I worked out a new form of ophthalmoscope and a very prominent manufacturer of optical apparatus called on me with a proposition to make this ophthalmoscope in large quantities and popularize it. In order to protect himself he proposed that he should take out a patent upon it, so that rivals should not get the advantage of his advertising of it, and he offered to pay me 10 per cent. of the gross receipts as my share. He explained how this had been done for others, and instanced a prominent member of the American Medical Association, whose instrument was fully described in this journal and exhibited, with a mark "patent applied for" upon it, before a section of the Association, and, so far as I know, no one ever suggested any censure or punishment of this gentleman for violation of the law in the American Medical Association. The exhibition of this patented instrument publicly demonstrated that the spirit of the Code could be violated with perfect impunity, that the Association as a body did not care to enforce it.

Third. The Code as it stands is a source of misunderstanding, both with the profession and with the general public. Partly from the inappropriateness of the language of 100 years ago to certain professional situations that exist to-day. More, perhaps by reason of false impressions as to what its provisions really are, arising in the minds of those who are inclined to read into it their own opinions and limitations. Certainly it is on this account subject to the undeserved hostility and contempt of many who hold just the principles it was designed to inculcate. The attitude towards it of the general public, and of more than two-thirds of the profession who have never been willing to subscribe to it, is certainly based on misapprehension, and, even among the members of the Association the widest diversity of interpretation may be found.

Take for instance, the most discussed provision, one that to many persons probably stands for the whole Code, that which declares against consultation with those "whose practice is based on an exclusive dogma to the rejection of the accumulated experience of the profession and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry." A large proportion of physicians, and the whole laity, seem to understand that this means that men holding different views as to the proper treatment of a case or the manner in which drugs act, are prohibited from meeting in consultation; an interpretation unjustified by any language of the Code, a clear reading into it of meaning it was not intended to convey, with the desire to find in it support for actions really arising from individual prejudice or caprice.

The argument will instantly be raised that the Code is not responsible for the mistakes of those who do not understand it. But there is the point: the Code is an expression of principles; in so far as it fails to express these principles clearly, it is a failure and has no reason to exist. It is a rule for guidance, and in so far as it fails to guide, or its guidance is in quite another direction from that intended it is a failure—a rule worse than useless.

Fourth. The existence of such a Code, misunderstood and rejected by the whole of the laity and a large proportion of the profession; unenforced by the societies that include it as part of their organic law, and which purports to have established finally and in the best possible manner the principles of professional ethics, tends to lessen respect for and obscure the understanding of those principles whose general appreciation is needed for the elevation and advancement of the profession. The absurdity of discussing questions of professional ethics that have been finally decided is so evident that practically no attempt at intelligent discussion of the foundations of professional ethics was made from the time of the adoption of the Code until the New York agitation for its amendment or repeal a few years ago.

The removal of these subjects from the sphere of professional discussion is largely responsible for the lack of a more general application of the principles of professional ethics. These principles, and the best methods for their application, are still properly matters for careful scientific study, not for dogmatism; and the Code, by apparently removing them from the sphere of scientific discussion has done positive harm.

The Code has never been so valuable for the advancement of the principles on which it is founded as it is now, when it becomes a subject for debate and revision.

Fifth. It is to-day the most serious obstacle to professional unity. On account of it, more than for any other reason, the majority of the profession remain outside the medical societies our Association represents. In the Association it is the cause of the widest divergence of opinion and the deepest and bitterest feeling. It is the cause of separation from the Association of the New York Medical Society, a body representing the largest proportion of the profession in the most populous State in the Union. Its existence has built up the medical sects, which to-day constitute the most serious obstacle to professional improvement, as those who have labored for the establishment of State Examination Boards know to their sorrow. The politically and socially powerful organizations known as Homœopathic and Eclectic Medical Societies would be utterly impossible except in the presence of the condensing and unifying influence of professional ostracism. The material of which such societies are usually composed is in the highest degree incoherent, and they could only be held together under this pressure.

These, Mr. Editor, are among the reasons that some of us see for revision of the Code. Some of the other aspects of the subject may be reserved for a second letter.

EDWARD JACKSON.

215 S. 17th St., Philadelphia, Pa.

NECROLOGY.

DR. MILTON JOSIAH ROBERTS, an eminent surgeon, editor and teacher of New York City, died on Wednesday the 26th ult., of pneumonia and renal disease. He was born in Ohio in 1850, educated at Cornell University, and graduated in medicine at the University of the City of New York, class of 1878. After serving a brief term as hospital interne, he took up his residence in New York, and as an assistant to Dr. Lewis A. Sayre took his life's bent in the direction of orthopædic surgery. He became a professor in that department at the Vermont University and the Post-Graduate School of New York. He was an early advocate of Listerian surgery, in the furtherance of which cause he was influenced to found a monthly publication, known as the *International Journal of Surgery and Antiseptics*. This journal was also the channel of presentation to the profession of not a few of Dr. Roberts' devices and new instruments that his inventive faculty, which was shrewd and fertile, developed for use in osseous and articular surgery. He was visiting surgeon to the Randall's Island hospitals, where his services were of untold value to hundreds of deformed children. He was an active member in the State Medical and other social bodies, to all of which he freely contributed papers as occasion required.

DR. J. S. DORSEY CULLEN, who died in Richmond, Va., on March 23, in the sixty-second year of his age, was a member of the American Medical Association since 1877. He was the son of Dr. John Cullen of Dublin and Richmond, one of the founders of the medical department of the Hampden-Sidney College, now the Medical College of Virginia, and its professor of medicine. Dr. Dorsey Cullen graduated from this school in 1853, after which he spent two years or more in Philadelphia, as interne at the St. Joseph's and Blockley hospitals. During the civil war he served as brigade and division surgeon on the Confederate staff with great distinction, so that at the time when the peace came he was in the responsible position of medical director of the First Army Corps, Army of Northern Virginia. He was physician and surgeon to the almshouse and hospital, and professor of diseases of women and children in the Medical College of Virginia, until about 1881; at which time, upon the resignation of Dr. Hunter McGuire from the chair of surgery, Dr. Dorsey Cullen was chosen to that department. He was one of the founders of the *Virginia Clinical Record*, in 1871, and a co-editor thereof during a part of the time until 1874. He was one of the charter members of the State Society, and interested in the progress of the Southern interstate societies of various names.

PROFESSOR BENJAMIN BALL of the Faculty of Medicine of Paris, who died recently in his sixtieth year, was an author on mental diseases whose elegance of diction and lucidity of instruction brought to mind the qualities of the late Dr. Thomas Watson of London. Dr. Ball was not infrequently styled "the orator of the Academy." His final illness was progressive paralysis. His chief work was entitled "Les Maladies Mentales," and indicated the line of his instructions as professor of that branch in the Medical Faculty of Paris.

MEMORIAL OF DR. THOMAS FANNING WOOD, OF WILMINGTON —The *North Carolina Medical Journal* for April reports that the widow of Dr. Wood has donated the valuable library left to her to the University of North Carolina, where it will remain *in perpetuo*, bearing his honored name. The trustees of the University design still further to commemorate that name by the creation of two Wood scholarships, one of them in the medical department and the other in the department of literature. Dr. Wood was a true book-lover and quite an active collector of rare volumes, his specialties being in vaccination and botany. His long tenure of the position of editor of the journal above named brought into his library a vast number of publications that could not readily otherwise be brought within the reach of the University which now falls heir to them.

MISCELLANY.

DR. DONALD MCLEAN of Detroit, has had the degree of LL.D. conferred upon him by the Queen's University of Kingston, Canada.

TWENTY-FIFTH Annual Meeting of the Nebraska State Medical Society will be held at Nebraska City, Neb., May 16, 17 and 18, 1893.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS will hold its sixth annual meeting at the Russell House, Detroit, Mich., on Thursday, Friday and Saturday, June 1, 2, and 3, 1893, under the presidency of Dr. Lewis S. McMurtry of Louisville. The following is the preliminary program as far as titles are announced:

1. The President's Address—The Present Position of Pelvic Surgery, by L. S. McMurtry, Louisville.
2. Abdominal Fixation, by Florian Krug, New York.
3. Endoscopic Tubes for Direct Examination of the Interior of the Uterus and Bladder, by Robert T. Morris, New York.
4. Placenta Previa, by William H. Wenning, Cincinnati.
5. What are the Indications for Abdominal Section in Intra-Pelvic Hemorrhage? by M. Rosenwasser, Cleveland.
6. Treatment of Metritis, by E. Pietranera, Cordova, A. R.
7. A Plea for Better Surgery in the Closure of the Abdominal Incision, by H. W. Longyear, Detroit.
8. Remarks on the Treatment after Abdominal Incision, by C. C. Frederick, Buffalo.
9. The Management of the Abdominal Incision, by Chas. A. L. Reed, Cincinnati.
10. Dilatation of the Cervix for Dysmenorrhea, by E. M. Pond, Rutland.
11. Extra-Uterine Pregnancy; with Report of Cases, by George S. Peck, Youngstown.
12. A Contribution to the Study of Ectopic Gestation, by E. Arnold Praeger, Nanaimo.
13. A Few Practical Notes on the Establishment of Anastomosis between the Gall-Bladder and Intestine for Obstruction of the Common Duct with the Relation of a Case of Obstruction of the Common Duct by Small Growth, by James F. W. Ross, Toronto.
14. Vaginal Hysterectomy for Malignant Disease, by Rufus B. Hall, Cincinnati.
15. The Care of Pregnant Women, by John Milton Duff, Pittsburgh.
16. A Contribution to the Pathology of Surgical Disease of the Gall-Bladder, by Walter P. Manton, Detroit.
17. The Legal Questions in Gynecological Operations on the Insane, by Walter P. Manton, Detroit.
18. Pelvic Abscess, by I. S. Stone, Washington.
19. Central Rupture of the Perineum; its Causation and Prevention, by John C. Sexton, Rushville.
20. A Case of Myomectomy with Extra-Peritoneal Treatment of the Pedicle, followed by Pregnancy and Complicated by Hemorrhages through the Abdominal Cicatrix, by X. O. Werder, Pittsburg.
21. Anatomy and Surgical Importance of the Peri-Renal Cellulo-Adipose Tissue, by L. H. Dunning, Indianapolis.
22. Reports of Cases from Practice with Remarks on the Same, by A. Vander Veer, Albany.
23. Further observation on the Relation of Pelvic Disease and Psychical Disturbances in Women, by George H. Rohé, Catonsville.

A cordial invitation is extended to the members of the medical profession interested in the work of the Association to attend its several sessions.

By order of the Executive Council.

WILLIAM WARREN POTTER, *Secretary.*

AMERICAN PEDIATRIC SOCIETY.—The American Pediatric Society will hold its fifth annual meeting at West Point, New York, May 24, 25 and 26, 1893. The sessions will be held at Cranston's Hotel.

PRELIMINARY PROGRAM.

WEDNESDAY, MAY 24—FIRST SESSION—8 P. M.

1. The President's Address, by A. D. Blackader, Montreal, Canada.
2. This Year's Failures in Diphtheria, by M. P. Hatfield, Chicago, Ill.
3. The Value of Peroxide of Hydrogen in Diphtheria, by J. Lewis Smith, New York City.
4. Brief Notes on the Use of Antipyretic Drugs in the Febrile Affections of Children, by J. P. Crozer Griffith, Philadelphia, Pa.
5. A Case of Laryngeal Diphtheria, by W. D. Booker, Baltimore, Md.
6. Concerning the Care of the Throat and Ears of Children, by W. P. Northrup, New York City.

THURSDAY, MAY 25—MORNING SESSION—9:30 A. M.

7. Intestinal Fever, by A. Jacobi, New York City.
8. Report on a Revisionary Nomenclature of Gastro-Intestinal Diseases, by T. M. Rotch, Boston. (Discussion to be opened by L. Emmett Holt.)
9. Proctitis in Early Infancy, by Louis Starr, Philadelphia, Pa.
10. Studies of Milk from Large Western Dairies, by J. M. Keating, Colorado Springs.
11. Pulmonary Tuberculosis, by William Osler, Baltimore, Md.
12. Report on the Nomenclature of Diseases of the Mouth, by T. M. Rotch, Boston. (Discussion to be opened by F. Forchheimer.)
13. A Case of False Meningocele, by Irving M. Snow, Buffalo, N. Y.

The members of the Society will dine together at 6:30 P. M.

THURSDAY, MAY 25—EVENING SESSION—8:30 P. M.

14. Discussion on the Treatment of Pertussis: *a.* Local, J. P. Crozer Griffith; *b.* Constitutional, F. Forchheimer; *c.* Climatic, William Osler; *d.* Complications, Henry D. Chapin; *e.* General Discussion.
15. Discussion on the Treatment of Constipation in Early Infancy: *a.* Dietetic, L. Emmett Holt; *b.* Medicinal, C. F. Putnam; *c.* Local, Leroy M. Yale; *d.* General Discussion.

FRIDAY, MAY 26—MORNING SESSION—9:30 A. M.

Business Meeting (Private) from 9:30 to 10:30.

16. Etiology of Incontinence of Urine, B. K. Rachford, Newport, Ky.
17. Meningitis Complicating Pneumonia, L. Emmett Holt, New York City.
18. A Paper (subject to be announced), Henry D. Chapin, New York City.
19. Treatment of Certain Forms of Anæmia in Children, F. Forchheimer, Cincinnati, O.
20. Some Points in Connection with the Etiology of Rachitis, J. Lewis Smith, New York City.
21. Treatment of Rachitis with the Lacto-Phosphate of Lime, J. Henry Fruitnight, New York City.
22. Report of Five Cases of Tetany, J. P. Crozer Griffith, Philadelphia, Pa.
23. Acute Scleroderma, William Osler and Dr. Barker.

FRIDAY, MAY 26—AFTERNOON SESSION—2:30 P. M.

24. A case of Erysipelas of the Scalp and Face in an Infant Aged Six Weeks, Samuel S. Adams, Washington, D. C.
25. Description of a New Incubator, T. M. Rotch, Boston, Mass.
26. A Case, W. P. Northrup, New York City.
27. A Gastric Neurosis in Childhood, Irving M. Snow, Buffalo, N. Y.

SAMUEL S. ADAMS, *Sec'y.*

1632 K St., Washington, D. C., April 25, 1893.

OFFICIAL LIST OF CHANGES in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from April 29, 1893, to May 5, 1893.

A board of medical officers to consist of Lieut.-Col. George M. Sternberg, Deputy Surgeon-General; Lieut.-Col William D. Wolverton, Deputy Surgeon-General; and Major Joseph R. Gibson, Surgeon, is appointed to meet at West Point, N. Y., June 1, 1893, or as soon thereafter as practicable, for the physical examination of the cadets of the graduating class of the U. S. Military Academy, and such other cadets of the academy, and candidates for admission thereto, as may be ordered before it.

Capt. Henry S. Turrill, Asst. Surgeon U. S. A., ordered to report in person to the president of examining board at Omaha, Neb., for examination, with a view to determine his fitness for promotion as contemplated by the Act of Congress approved October 1, 1890.

Major John H. Janeway, Surgeon U. S. A., is granted leave of absence for three months and fourteen days. By direction of the Acting Secretary of War.

Col. Charles T. Alexander, Asst. Surgeon-General, is detailed as a member of the Army Medical Board, vice Col. Charles H. Alden, Asst. Surgeon-General, hereby relieved.